2C 49975
PJM Interconnection

PENNSYLVANIA-NEW JERSEY-MARYLAND INTERCONNECTION
955 JEFFERSON AVENUE
VALLEY FORGE CORPORATE CENTER
NORRISTOWN, PA 19403-2497
(215) 666-8800

EXPRESS MAIL - B 38773109

June 14, 1988

RECEIVED (Rec'd)

Ms. Suzanne Billings
U. S. Environmental Protection Agency, Region III
PA CERCLA Remedial Enforcement Section (3HW12)
841 Chestnut Building, 6th Floor
Philadelphia, PA 19107

Dear Ms. Billings:

This letter responds to Bruce Smith's letter dated March 31, 1988 to the PJM Interconnection (Philadelphia Electric Co. (PECo), Agent) under an extended June 15, 1988 response deadline as arranged with you.

Description of PJM Control Center Operations

Operations at the PJM Control Center are not those of a typical industrial operation. Rather, approximately 120 staff personnel work in a computerized office environment dedicated to coordinating the generation and transmission of electricity to meet electric load in the middle Atlantic states in a reliable and economic manner.

Re: Question(s)

1, 2, 3 — Attached are two listings of hazardous substances transported to, stored in, and used at our facility, with copies of Material Safety Data Sheets (MSDS's) which we have on file. Attachment "A" consists of substances we believe apply under EPA criteria. Attachment "B" consists of products identified under the Pennsylvania Right-to-Know criteria. These products are stored only for use.

4, 5, 6 — Attachment "C" consists of correspondence regarding our disposal of two transformers containing PCB's in 1982.

7, 8 — A lease agreement dated April 1, 1969 was executed between Circuit Leasing Company and PECo for our premises at 955 Jefferson Avenue, and is still in effect. We control the property and facility.

A second office lease agreement dated February 1986 was executed between PECo and Two Valley Forge Eisenhower Associates for general office purposes for our premises at Pinebrook on 2550 Eisenhower Avenue in the Valley Forge Corporate Center. In May 1987, the ownership changed to Mortgage and Realty Trust. The lease is still in effect.

AR200735

-continued-

Please contact William J. Bryson (666-8888) or me (666-8831) with any questions.

Very truly yours,

M. H. Porter
Controller

Attachments
MHP/las:6476G
xc: T. R. Woodward (w/o attachments)
C. F. Doll (w/o attachments)
C. B. Woodward (w/o attachments)
K. W. Laughlin (w/o attachments)
D. S. Frieman (w/o attachments)
W. J. Bryson
W. B. Willsey, PECo Director, Environmental Affairs

ATTACHMENT A

TRADE NAME	MANUFACTURER	CONTAINER SIZE	CONTAINERS STORED	STATE	STORAGE
Chapco 116 Bond Solvent	Chicago Adhesive Products Co.	1 quart	1-2	Liquid	Locked Metal Cabinet
Dazzle Metal Cleaner & Polish	Rite-Off, Inc.	19 ounce Aerosol can	2	Liquid	Locked Metal Cabinet
Bestline Solvent & Thinner	Union Rubber, Inc.	16 ounce can	1	Liquid	Locked Metal Cabinet
Instant Kleen-All	Tech Spray	16 ounce Aerosol can	2	Liquid	Locked Metal Cabinet
Lectra Celan Aerosol #2018	C.R.C. Chemicals	19 ounce can	4	Liquid	Locked Metal Cabinet
Lubrisil Aerosol Lubricant	Penetone Corp.	12 ounce can	1	Liquid	Locked Metal Cabinet
1,1,1 Trichloroethane	Globe Solvents Co.	1 gal. can	2	Liquid	Locked Metal Cabinet
Electrical Quality Silicone Aerosol	CRC Chemicals	19 ounce Aerosol can	1	Liquid	Locked Metal Cabinet
Silazene Silicone Spray #7499	Chem-1-Cap	22.5 ounce Aerosol can	3	Liquid	Locked Metal Cabinet
PACO Solvent (Denatured Alcohol)	Publicker Industries	1 gal. can	1	Liquid	Locked Metal Cabinet
M-300 Oil Free Dispersing Cleaner	M-Oil-Free Co.	1 gal. plastic bottle	1	Liquid	Locked Metal Cabinet

HR2367737

JJB/las:6479G
6/14/88

CYANAMID

MATERIAL SAFETY DATA SHEET

2C Interconnection

SHEET NO. 0087-01

MANUFACTURER: AMERICAN CYANAMID COMPANY
WAYNE, NEW JERSEY 07470

CAS NO. 000121-75-5

EMERGENCY TELEPHONE:(201) 835-3100

DATE: 10/12/82

I. PRODUCT IDENTIFICATION

TRADE NAME: MALATHION ULV® Concentrate Insecticide

ORIGINAL (Red)

WARNING STATEMENT(S):
KEEP OUT OF REACH OF CHILDREN.
HARMFUL BY SWALLOWING, INHALATION, OR SKIN CONTACT.

SYNONYMS:
CYTHION®: O,O-Dimethyl phosphorodithioate of diethyl mercaptosuccinate;
Butanedioic acid, [(Dimethoxyphosphinothioyl)thio], Diethyl Ester;
S-[1,2-Bis(ethoxycarbonyl)ethyl]O,O-dimethyl phosphorodithioate

CHEMICAL FAMILY: Organophosphate

MOLECULAR FORMULA: $C_{10}H_{19}O_6PS_2$ MOLECULAR WGT: 330.36

II. HAZARDOUS INGREDIENTS

COMPONENT	CAS. NO.	%	TWA/CEILING	REFERENCE
MALATHION	000121-75-5	91-96	15mg/m3 8hrTWA	OSHA
			10mg/m3 8hrTWA	ACGIH-80

III. PHYSICAL PROPERTIES

APPEARANCE AND ODOR: Clear, brown-to-colorless liquid; characteristic mercaptan odor.

BOILING POINT: 312.8° F 156° C @ 0.7mm/Hg MELTING POINT: 37.13° F 2.85° C

VAPOR PRESSURE: 0.00004mmHg @ 30° C SPECIFIC GRAVITY: 1.23 @ 25° C

VAPOR DENSITY: Not Applicable % VOLATILE (BY VOL.): Negligible

OCTANOL/H_2O PARTITION COEF.: 777 EVAPORATION RATE: Negligible

SATURATION IN AIR (BY VOL.): Not Available

PH: In water it is neutral or slightly acidic. Hydrolysis with standing will become more acidic.

AR200738

SOLUBILITY IN WATER: 145 ppm @ 25° C

IV. FIRE AND EXPLOSION HAZARD DATA

.ASH POINT: >325° F >162.7° C FLAMMABLE LIMITS: Not Applicable
(METHOD) Tag Open Cup

AUTOIGNITION TEMP.: Not Available
DECOMPOSITION TEMP.: Slow decomposition above 48.8° C (120° F)

FIRE EXTINGUISHING MEDIA
Water, foam, carbon dioxide or dry chemical.

FIRE CONTROL TACTICS:
Wear self-contained, positive pressure breathing apparatus and full firefighting protective clothing. Alert medical personel to be ready to treat poisoning cases. Decontaminate when leaving fire area. Keep unnecessary people away, fight fire upwind. Dike area of fire to prevent pesticide runoff. Use a little water as possible. Hot containers may explode, use water to keep containers cool.

V. NFPA HAZARD RATING

Hazard Rating Not Assigned By NFPA

VI. REACTIVITY DATA

STABILITY: STABLE @ 25° C
UNSTABLE @ > 48.8° C

CONDITIONS TO AVOID:
Storage at 50-115° C leads to non-hazardous decomposition. Heating at > 150° C causes rapid decomposition. Reactivity with stong base may generate excessive heat. Unstable @ pH 12.

POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID:
Temperatures above 120° F (48.8° C). Will decompose to a jelly @ 160° C.

INCOMPATIBLE MATERIALS:
Strong alkalies and strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce hydrogen sulfide, carbon monoxide, carbon dioxide, sulfur dioxide, and/or phosphorous trioxide, methyl mercaptan, dimethyl sulfide and other organic decomposition products.

VII. HEALTH HAZARD INFORMATION

TOXICITY DATA, EFFECTS OF OVEREXPOSURE, EMERGENCY & FIRST AID PROCEDURES

INGESTION TOXICITY:
Acute oral LD50 rat - range 1000-2800mg/kg.
FIRST AID:
Induce vomiting by giving 2 glasses of water and (a) stimulating back of throat with fingers or (b) giving syrup of ipicac 30ml. Never give anything by mouth or induce vomiting in an unconscious person. Obtain medical care without delay. Give oxygen if person has difficulty breathing. Give artificial respiration if person is not breathing.

SKIN CONTACT:
Slightly irritating to rabbit skin. Acute dermal LD50 rabbit - 4100mg/kg.
FIRST AID:
Remove contaminated clothing without delay. Wear impervious gloves. Cleanse skin thoroughly with soap and water. Do not omit cleansing hair or under fingernails if contaminated. Do not reuse clothing without laundering. Do not reuse contaminated leatherware. Obtain medical care without delay. Give oxygen if person has difficulty breathing. Give artificial respiration if person is not breathing.

EYE CONTACT:
Non-irritating to rabbit eyes.
FIRST AID:
Immediately irrigate with plenty of water for 15 minutes.

INHALATION TOXICITY:
Inhalation exposure is not likely to produce any significant effects due to the low vapor pressure of the product. Overexposure to an aerosol may produce cholinesterase depression.
FIRST AID:
Remove from from exposure. Administer oxygen if there is difficulty in breathing. Obtain medical care without delay.

NOTES TO PHYSICIAN:
Parasympathomimetic agent. Erythrocyte cholinesterase activity should be measured. Signs and symptoms include, progressively: headache, lightheadedness, mioses with loss of accomodation, nausea, vomiting, hyperhidrosis, muscle fasciulations, sphincter failure, coma, and death. If signs or symptoms are present, give atropine, 4mg, I.V.. Repeat every 10 minutes until atropinized. Observe for at least 48 hours. Opiates and phenothiazine tranquilizers are contraindicated.

VIII. EXPOSURE CONTROL METHODS

Skin or eye contact should be prevented by wearing rubber gloves, apron and boots with chemical splash goggles. A long sleeve shirt and full length pants (or coveralls) should also be worn. Wash hands with soap and water before eating, smoking, or using the toilet. Shower after completion of work shift. Launder clothing prior to reuse.

IX. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Wear rubber boots, gloves, and splash goggles. Absorb spilled material with clay or soda ash. Sweep up and place in closed container. Treat contaminated area with a full-strength liquid household clorine bleach, let stand for 15 minutes and repeat procedure. Flush area with water.

WASTE DISPOSAL:
Dispose of waste materials only at state or federally approved disposal sites.

X. SPECIAL PRECAUTIONS

HANDLING AND STORAGE/OTHER:
Because of this material's flash point, areas containing this material should conform to the codes (such as, NFPA 30 and NFPA 70) governing Class III Combustible Liquids.
Segregate from incompatible materials listed in Section VI.

XIII. APPENDIX

ORIGINAL (Red)

•REGISTERED TRADEAMRK OF THE AMERICAN CYANAMID COMPANY

SOURCE AND DATE OF INFORMATION

: 10/12/82 CYANAMID AGRICULTURAL GROUP WAYNE, NEW JERSEY SHEET NO. 0087-01

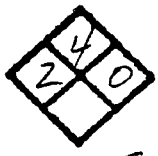
information and statements herein are believed to be reliable but are not ›e construed as a warrenty or representation for which we assume legal re- ›sibility . Users should undertake sufficient verification and testing to ›rmine the suitability for their own particular purpose of any information ›roducts referred to herein. NO WARRENTY OF FITNESS FOR A PARTICULAR 'OSE IS MADE.

MATERIAL SAFETY DATA SHEET

MANUFACTURER'S NAME:

NERVOE-PACIFIC CO.
2424 MERCED ST.
SAN LEANDRO CA 94577

DATE OF PREPARATION: 10-02-1985



PPE E
UN 1263

EMERGENCY TELEPHONE NO.:
(415) 351-4860

INFORMATION TELEPHONE NO.:
(415) 351-4860

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER: 9
PRODUCT NAME: MARKING PAINTS - ALL COLORS
PRODUCT CLASS: AEROSOL PAINT

RECEIVED
JUL 5 P 1985
C. MURAWCZYK

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	CAS NUMBER	WEIGHT PERCENT	OCCUPATIONAL EXPOSURE LIMITS	VAPOR PRESSURE mm Hg @ TEMP	
S 01 MINERAL SPIRITS	8032 32 4	< 5.0%	500 PPM	2.0	20C
S 02 V.M.&P. NAPHTHA	8030306	< 5.0%	300 PPM	15.0	37C
S 11 TOLUENE	108883	20	200 PPM	21.9	20C
S HEXANE	110543	15	500 PPM	125.0	20C
S XYLENE	1330207	< 5.0%	100 PPM	19.4	20C
R 1A PROPANE	74 98 6	10	800 PPM	5689.0	20C
R 1B ISOBUTANE	75 28 5	15	800 PPM	1551.0	20C

SECTION III - PHYSICAL DATA

BOILING RANGE: -10 F deg.(est) VAPOR DENSITY: HEAVIER THAN AIR

EVAPORATION RATE: FASTER THAN ETHER % VOLATILE VOLUME: 83.89 WT/GAL: 6.91

AR200743

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: Flammable Liquid - Class IA

ORIGINAL (Red)

FLASH POINT: -19 F deg. (est.) **LEL:** 0.9

EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG,

UNUSUAL FIRE AND EXPLOSION HAZARDS:
CLOSED CONTAINERS MAY EXPLODE DUE TO BUILD UP OF PRESSURE FROM EXTREME HEAT OR FIRE. AEROSOL SPRAY IS EXTREMELY FLAMMABLE.

SPECIAL FIREFIGHTING PROCEDURES:
WATER SPRAY MAY BE INEFFECTIVE, BUT WATER SPRAY MAY BE USED TO COOL CONTAINERS EXPOSED TO HEAT OR FIRE TO PREVENT PRESSURE BUILD UP.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:
INHALATION: ANESTHETIC. IRRITATION OF THE RESPIRATORY TRACT,OR NERVOUS SYSTEM DEPRESSION-CHARACTERIZED BY HEADACHE, DIZZINESS, NAUSEA, OR POSSIBLE UNCONSCIOUSNESS. SKIN OR EYE CONTACT: PRIMARY IRRITATION. PROLONGED OR REPEATED CONTACT TO SKIN MAY CAUSE DERMATITIS - EXERCISE DUE CARE

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:
NONE KNOWN

PRIMARY ROUTE(S) OF ENTRY: DERMAL, INHALATION,

EMERGENCY AND FIRST AID PROCEDURES:
VAPORS: REMOVE FROM EXPOSURE AND RESTORE BREATHING, SEEK MEDICAL ATTENTION.
SPLASH: [SKIN] WASH AFFECTED AREA, REMOVE CONTAMINATED CLOTHING, SEE PHYSICIAN IF ANY IRRITATION PERSISTS.
SPLASH: [EYES] FLUSH IMMEDIATELY WITH WATER FOR 15 MINUTES AND TAKE TO A PHYSICIAN.

SECTION VI - REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE AND CARBON DIOXIDE

CONDITIONS TO AVOID:
HIGH TEMPERATURES

AR200744

INCOMPATIBILITY (MATERIALS TO AVOID):
STRONG OXIDIZING AGENTS

SECTION VII - SPILL OR LEAK PROCEDURES

ORIGINAL (Red)

S S TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REMOVE ALL SOURCES OF IGNITION: FLAMES, SPARKS, STATIC ELECTRICITY & ELECTRIC
VENTILATE AREA AND SOAK UP WITH INERT ABSORBENT USING NON-SPARKING TYPE TOOLS.

WASTE DISPOSAL METHOD:
DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
DO NOT INCINERATE CLOSED CONTAINERS.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION:
OUTDOORS: APPROVED MECHANICAL PARTICULATE FILTER TO REMOVE AIRBORNE OVERSPRAY
IN RESTRICTED AREAS WITH POOR VENTILATION USE APPROVED CHEMICAL-MECHANICAL
RESPIRATOR DESIGNED FOR USE WITH ORGANIC VAPORS.

VENTILATION:
ALL APPLICATION AREAS SHOULD BE ADEQUATELY VENTILATED IN ORDER TO KEEP SOLVENT
VAPORS BELOW T.L.V.

PROTECTIVE GLOVES:
S ENT RESISTANT GLOVES SHOULD BE USED IF CONTACT IS LIKELY.

EYE PROTECTION:
SAFETY GLASSES WITH SIDE SHIELDS IS RECOMMENDED TO PREVENT EYE CONTACT.

OTHER PROTECTIVE EQUIPMENT:

HYGIENIC PRACTICES:
AVOID PROLONGED OR REPEATED CONTACT. DO NOT BREATHE VAPORS.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
DO NOT STORE ABOVE 120 DEG. F. DO NOT STORE OR USE NEAR HEAT, SPARKS, OR FLAME

OTHER PRECAUTIONS:
DO NOT GET IN EYES. DO NOT BREATHE VAPORS. AVOID SKIN CONTACT. DO NOT TAKE
INTERNALLY. SMOKING WHILE USING THIS PRODUCT MUST BE STRICTLY PROHIBITED.

ORIGINAL (Red)

Material Safety Data Sheet

IDENTIFICATION

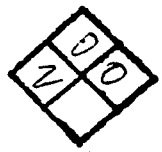
RECEIVED
JUL 31 1986
C. MURAWCZYK

Name:
MS-220 Aero-Duster

Chemical Family:
Halogenated Hydrocarbon

Synonyms:
Freon* 12, FC-12
Dymel* 12,
Dichlorodifluoromethane

Formula:
CCl_2F_2



PPE B

UN 1956

CAS Name:
Methane, Dichlorodifluoro

CAS Registry No.
75-71-8

Manufacturer/Distributor:
Miller-Stephenson Chemical Co.

Medical Emergency Phone:
(203) 797-2212

Address:
George Washington Highway
Danbury, Conn. 06810

Transportation Emergency Phone:
(800) 424-9300

PHYSICAL DATA

Boiling Point (F): -21.6

Percent volatile by Volume: 100

Density: 1.311 g/cc @77 F

Vapor Pressure: 80 psig @77 F

Vapor Density (Air = 1): 4.2

Solubility in H_2O: 0.028% by wt @ 77 F.

pH Information: Neutral

Evaporation Rate (ether=1): >8

Form: Liquefied Gas

Appearance: Clear

Color: Colorless

Odor: Slight ethereal odor

HAZARDOUS COMPONENTS

Material(s):
Dichlorodifluoromethane

Approximate % :
100

HAZARDOUS REACTIVITY

Stability: Material is stable. However, avoid open flames and high temperatures.

AR200746

Incompatibility: Alkali or alkaline earth metals; powdered Al, Zn, Be, etc.

ORIGINAL (Red)

Decomposition: Can be decomposed by high temperatures (open flames, glowing surfaces, etc.) forming hydrochloric and hydrofluoric acids - possible carbonyl halides.

Polymerization: Will not occur.

FIRE AND EXPLOSION DATA

Flash Point: None

Method: TOC

Autoignition Temperature:
Not determined

Flammable Limits in Air, % by Vol.
Lower: Non-flammable
Upper: Non-flammable

Autodecomposition Temperature:
Not determined

Fire and Explosion: Pressurized aerosol containers at elevated temperatures may vent, rupture, or burst and add to flying and falling debris. Intense heat may cause decomposition with emission of halogen acids.

Extinguishing Media: Non-flammable

Special Fire Fighting Instructions: Self-contained breathing apparatus (SCBA) may be required if aerosol cans rupture and contents are released under fire conditions.

HEALTH HAZARD INFORMATION

Principal Health Hazards:

Inhalation: Vapor is heavier than air and can cause suffocation by reducing oxygen available for breathing. Breathing high concentrations of vapor may cause light-headedness, giddiness, shortness of breath, and may lead to narcosis, cardiac irregularities, unconsciousness or death. LC50 rats, 800,000 ppm/30 min.

Skin: Liquid contact can cause frostbite

Eye: Liquid contact can cause frostbite. Tests in rabbit eyes with a 50% solution in mineral oil and with vapors resulted in no observable damage.

Oral: Rats were fed Freon* 12 dissolved in peanut oil. No deaths occurred at highest feasible dose - 1000 mg/kg.

AR200747

ORIGINAL

Exposure Limits:

Material	TLV (ACGIH)	PEL (OSHA)
Dichlorodifluoromethane	1000 ppm	1000 ppm

Safety Precautions: Avoid breathing vapors and liquid contact with skin or eyes. Do not turn aerosol can upside down when spraying. Use only in well-ventilated area.

First Aid:

Inhalation: Remove to fresh air, call a physician. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Do not give epinephrine or similar drugs.

> **Note to Physician:** Because of a possible increased risk of eliciting cardiac dysrythmias, catecholamine drugs, such as epinephrine, should be considered only as a last resort in life-threatening emergencies.

Eye: In case of liquid contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Skin: Flush with water. Treat for frostbite if necessary.

Medical Conditions Possibly Aggravated by Exposure:

Cardiovascular Disease - See Principal Health Hazard: Inhalation Section.

Other Health Hazards:

Freon* 12 is not classified as carcinogenic by IARC, NTP, or OSHA. Based on animal studies and human experiences this fluorocarbon poses no hazard to man relative to systemic toxicity, carcinogenicity, mutagenicity, or teratogenicity when occupational exposures are below its TLV*.

PROTECTION INFORMATION:

Generally Applicable Control Measures:
Normal ventilation for standard manufacturing procedures is generally adequate. Local exhaust should be used when large amounts are released. Mechanical ventilation should be used in low places.

Personal Protective Equipment:
Lined butyl gloves should be used when handling liquid. Chemical splash goggles should be worn when handling liquid. Under normal manufacturing conditions, no respiratory protection is required when using this prodect. Self-contained breathing apparatus (SCBA) is required if a large release occurs.

AR200718

ORIGINAL (Red)

DISPOSAL INFORMATION:

Spill, Leak or Release: Ventilate area - especially low places where heavy vapors might collect. Remove open flames.

Waste Disposal: Disposal service to landfill is appropriate. Do not puncture or incinerate aerosol cans.

SHIPPING INFORMATION:

Domestic - Other Than Air (DOT)

Proper Shipping Name: Dichlorodifluoromethane, Compressed Gas, NOS
Hazard Class: Non-flammable Gas
UN No.: 1956
DOT Label: Non-flammable Gas
DOT Placard: Non-flammable Gas

International Water or Air (IMO/ICAO)

Proper Shipping Name: Dichlorodifluoromethane, Compressed Gas, NOS
Hazard Class: 2
UN No.: 1956
IMO/ICAO Label: Non-flammable Gas

Other Information

Shipping Containers: Aerosol cans

Storage Conditions: Do not store near sources of heat, in direct sunlight or where temperatures exceed 49°C/120°F. Do not puncture or damage containers. Rotate stock to shelf life on one year.

Date Revised: 11/85
Person Responsible: Janet Stephens,
Miller-Stephenson Chemical Co., Inc.
George Washington Highway
Danbury, Conn. 06810
(203) 743-4447

AR200749

*Freon is DuPont's registered trademark for its fluorocarbon compounds.

Material Information Bulletin

(Approved – " Essentially Similar" to Form OSHA 20, Material Safety Data Sheet)

ORIGINAL (Red)

Chevron

ORTHENE 75 S Soluble Powder **Product 5332**

CAUTION! **HARMFUL IF SWALLOWED**
MAY CAUSE EYE IRRITATION
KEEP OUT OF REACH OF CHILDREN

TYPICAL COMPOSITION

Acephate: O,S-Dimethyl acetylphosphoramidothioate (CAS 30560-19-1)	75%
Inert Ingredients	25%

EXPOSURE STANDARD

No OSHA exposure standard or Threshold Limit Value has been established for this material.

PHYSIOLOGICAL & HEALTH EFFECTS / EMERGENCY & FIRST AID PROCEDURES

Eyes

May cause moderate eye irritation. Application into the eyes of rabbits produced moderate membrane irritation without corneal involvement.

Wash eyes with fresh water for at least 15 minutes. If irritation continues, see a doctor.

Skin

May cause skin irritation on prolonged or frequently repeated contact. Application onto the skin of rabbits produced slight erythema and edema. Score = 1.7. Not expected to be acutely toxic by skin absorption. The acute dermal LD_{50} in rabbits was greater than 10 g/kg. See Additional Health Data.

Wash thoroughly with soap and water following skin contact. See a doctor if any signs or symptoms described in this bulletin occur. Launder contaminated clothing.

Inhalation

Expected to have slight acute toxicity by inhalation. The inhalation LC_{50} (rat) for a one-hour exposure was greater than 11 mg/liter.

If respiratory irritation or any signs or symptoms, as described in this bulletin occur, move the person to fresh air. If any of these effects continue, see a doctor.

Ingestion

Expected to have slight acute toxicity by ingestion. The acute oral LD_{50} (rat) was 1494 mg/kg. See Additional Health Data.

If swallowed, give a large amount of water to drink, make person vomit and call a doctor.

AR200750

ORIGINAL (Red)

ADDITIONAL HEALTH DATA

See Page 3.

SPECIAL PROTECTIVE INFORMATION

Eye Protection: Avoid contact with eyes. Eye contact can be avoided by wearing chemical safety goggles.

Skin Protection: Avoid contact with skin or clothing. Skin contact can be minimized by wearing impervious protective clothing including rubber gloves.

Respiratory Protection: Avoid breathing vapor, dust or spray mist. Breathing the vapor, dust or spray mist can be minimized by wearing an approved respirator for pesticides.

Ventilation: Use this material only in well ventilated areas.

Other: If eye or skin contact can occur, washing facilities for eyes and skin should be available nearby.

FIRE PROTECTION

Flash Point: n/a
Autoignition Temp.: n/a
Flammability Limits: n/a
Extinguishing Media: CO_2, Dry Chemical, Foam, Water Spray.
Special Fire Fighting Procedures: Smoke from fires involving this material may present unusual hazards. Avoid breathing smoke or mists. Avoid contact with fallout or runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Read the entire bulletin.

SPECIAL PRECAUTIONS

READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.
Do not contaminate food or foodstuffs.
Do not store or transport near feed or food.
Keep in original container. Do not put in food or drink containers. Store in cool dry place. Protect from excessive heat.

ENVIRONMENTAL PROTECTION

Environmental Impact: This product is highly toxic to bees exposed to direct treatment or residues on crops. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of waste. For help with any spill, leak, fire or exposure involving this material, call day or night (415) 233-3737.
Precautions if Material is Released or Spilled: Vacuum (preferred) or sweep up material and place in disposable container. Scrub contaminated area with detergent and water, picking up liquid with rags or absorbent material. Place in container for disposal. Repeat if necessary.
Waste Disposal Methods: Contaminated cleanup materials may be hazardous. Refer to Special Protective Information before handling. Contaminated materials should be placed in disposable containers and buried in an approved dumping area.

REACTIVITY DATA

Stability (Thermal, Light, etc.): Stable.
Incompatibility (Materials to Avoid): Contact with alkaline materials, including hypochlorite oxidants, may produce noxious gases.
Hazardous Decomposition Products: Normal combustion forms carbon dioxide and water vapor and may produce oxides of sulfur, nitrogen and phosphorus; incomplete combustion can produce carbon monoxide.
Hazardous Polymerization: Will not occur.

PHYSICAL PROPERTIES

Solubility: Soluble in water; moderately soluble in alcohol and acetone. Slightly to moderately soluble in aromatic solvents.

Appearance (Color, Odor, etc.): White powder with a strong mercaptan-type odor.

Boiling Point: n/a
Melting Point: n/a
Specific Gravity: NDA
Vapor Pressure (mm Hg & Temp.): n/a
Vapor Density (Air = 1): n/a
Percent Volatile (Volume %): n/a
Bulk Density: 0.4 to 0.6 g/cc

AR200751

n/a = Not Applicable
NDA = No Data Available

The above information is based on data of which we are aware and is believed to be correct as of the date hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

CRR-6745(B)(10M-9-79) Printed in U.S.A.

SUPPLEMENT

ORTHENE 75 S Soluble Powder **Product 5332**

ADDITIONAL HEALTH DATA

This product contains an organic phosphorus insecticide which inhibits cholinesterase. Signs and symptoms which may be seen following ingestion may include, but may not be limited to, constriction of the pupil of the eye, blurred vision, excessive salivation or nasal discharge, profuse sweating, cramps, nausea, vomiting, retching, production of tears, twitching, tremors or convulsions. In severe cases, death may result from respiratory failure or cardiac arrest. Signs and symptoms may be delayed but rarely begin later than 12 hours after exposure. Repeated exposure may result in depletion of cholinesterase. Additional slight exposure may result in acute intoxication.

Note to Physician: Blood cholinesterase levels may be useful in monitoring exposure. If signs of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM (PROTOPAM) is also antidotal and may be used in conjunction with atropine but should not be used alone.

In a rat lifetime feeding study, three groups of 75 animals of each sex were fed ORTHENE Technical in their food for 28 months. The daily dose levels were approximately 0.3, 2.8 and 42.6 mg of ORTHENE per kilogram of body weight. The most significant treatment-related effect was the decrease in cholinesterase activity of plasma, RBC and brain. The low dose of 0.3 mg/kg/day was the no-effect level for RBC and plasma cholinesterase inhibition. We believe this dose to also be a no-effect level for brain cholinesterase depression, although there was occasional depression of brain cholinesterase noted. This appeared to be random in occurrence and not treatment-related. The two additional findings of interest were the increased liver/body weight ratio of high-dose females and a higher incidence of adrenal medullary tumors in treated male rats. The incidence of the adrenal medullary tumors was not considered to be significantly elevated above historical control values. There were no differences between control and treated animals in physical appearance (e.g., no physical signs suggestive of cholinesterase inhibition), mortality, hematology, clinical chemistry, or urinalysis. All other non-neoplastic and neoplastic findings were those commonly seen in the laboratory rat and were considered to have no relationship to ingestion of ORTHENE.

In a mouse lifetime feeding study, three groups of 75 mice of each sex were fed ORTHENE Technical in their food for 104 weeks. The daily dose levels were approximately 7.5, 39 and 156.5 milligrams of ORTHENE per kilogram/body weight. Body weights of the mid- and high-dose animals were 10-29% less than weights of control animals, but there was no effect on survival. A compound-related increase in liver weight, together with liver carcinoma (a common form of cancer in mice) in the high-dose females, was observed. These changes did not occur in the males at any dose level or in the low- or mid-dose females. Other liver pathology changes were observed in the mid- and high-dose animals of both sexes, but only the high-dose females showed liver cancer. No liver pathology was observed in the low-dose animals of either sex. Lung, nasal cavity, and mediastinal lymph node changes, such as pigmented macrophages, were seen at an increased incidence in treated animals, but were also seen in controls. The toxicological significance, if any, of these findings is unclear. Treatment-related mineral deposits were also observed in kidney tubules of high-dose male mice.

Although ORTHENE has shown some weak mutagenic activity in in vitro, results of several in vivo mutagenicity studies indicate that ORTHENE is not mutagenic in whole animals.

In a recently completed reproduction study, three groups of male and female rats were fed ORTHENE Technical (2.5, 7.5 and 25 mg/kg/day) continuously for two generations through weaning of the third generation. There were treatment-related effects at 7.5 and 25 mg/kg/day, including reduced mating performance, number of litters born, reduced litter size at birth and number of litters weaned. The low dose (2.5 mg/kg/day) was judged to be a no-effect level.

AR 207 52

To our knowledge, ORTHENE has not been associated with cancer or other chronic toxicity or decreased reproductive performance in humans. However, because of the results discussed above, this pesticide should be handled as outlined in the bulletin and on the product label.

XEROX

Material Safety Data Sheet

MSDS No.: 0311
Date: Oct. 15, 1984
Revision: Sept. 29, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Photoreceptor Part No. : 1R76

Chemical Name: None

Ingredients	CAS No.
Substrate (>99%):	
Aluminum Drum	7429-90-5
Coating (<1%):	
Selenium (>99%)	7782-49-2
Tellurium (<1%)	13494-80-9
Arsenic (<0.1%)	7440-38-2

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Not Applicable
Ingestion: Not Applicable
Primary Route of Entry: Skin
Symptoms of Overexposure: None

Additional Information: See Sections V through IX.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic
Dermal LD_{50}: 2 g/kg (Rabbits) practically non-toxic
Inhalation LC_{50}: N. A.
Eye Irritation: (Rabbits) slightly irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: N.A.

Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

Additional Information: This product contains less than 0.1% Arsenic which is classified as a carcinogen by OSHA, NTP and IARC.

TLV: 0.2 mg/m³ (Selenium)
0.1 mg/m³ (Tellurium)
0.2 mg/m³ (Arsenic)

PEL: 0.2 mg/m³ (Selenium)
0.1 mg/m³ (Tellurium)
0.01 mg/m³ (Arsenic)

AR200753

[1]XEL: 0.01 mg/m³ (Tellurium)
0.01 mg/m³ (Arsenic)

[1]XEL - Xerox Exposure Limit

N A - Not Applicable

Section IV - Physical Data

Appearance/Odor: Solid / Odorless
Boiling Point: N.A.
Solubility in Water: Insoluble
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H_2O = 1): N.A.
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Carbon dioxide, Foam

Special Fire Fighting Procedures: When in a machine, treat as an electrical fire.

Fire and Explosion Hazards: Exposure to high temperatures can result in melting and pyrolysis. Fumes may cause respiratory symptoms. Delayed effects may occur up to 72 hours.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Oxides of Selenium, Arsenic and Tellurium.

Incompatability (Materials to Avoid): Strong Acids

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: None required when used as intended in Xerox equipment.

Section VIII - Special Precautions

Handling and Storage: Use wet pumicing and polishing procedures.

Conditions to Avoid: Avoid exposure to high temperatures

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Particles of coating detached through physical damage must be collected and disposed of as a chemical waste.

Waste Disposal Method: Return used or damaged photoreceptor to Xerox or supplier. Under present EPA Regulations, it is not classified as a hazardous waste. However, disposal in a chemical waste landfill is recommended. Insure conformity with federal, state and local regulations.

Section X - Transportation Information

AR200754

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A.
ID Number: N. A.

XEROX

Material Safety Data Sheet

MSDS No.: 0311A
Date: May 8, 1985
Revision: Sept. 19, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Photoreceptor Part No. : 1R80

Chemical Name: None

Ingredients	CAS No.
Substrate (80-85%):	
Nickel Drum	7440-02-0
Coating (15-20%):	
Selenium (>99%)	7782-49-2
Tellurium (<1%)	13494-80-9
Arsenic (<0.1%)	7440-38-2

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Not Applicable
Ingestion: Not Applicable
Primary Route of Entry: Skin
Symptoms of Overexposure: None

Additional Information: See Sections V through IX.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic
Dermal LD_{50}: 2 g/kg (Rabbits) practically non-toxic
Inhalation LC_{50}: N. A.
Eye Irritation: (Rabbits) slightly irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: N.A.

Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

Additional Information: This product contains Nickel and Arsenic which are classified as carcinogens by OSHA, NTP and IARC.

TLV: 1 mg/m³ (Nickel)
0.2 mg/m³ (Selenium)
0.1 mg/m³ (Tellurium)
0.2 mg/m³ (Arsenic)

PEL: 1 mg/m³ (Nickel)
0.2 mg/m³ (Selenium)
0.1 mg/m³ (Tellurium)
0.01 mg/m³ (Arsenic)

[1]XEL: 0.01 mg/m³ (Tellurium)
0.01 mg/m³ (Arsenic)

[1]XEL - Xerox Exposure Limit

AR200735

N.A. - Not Applicable

Trade Name: 1025/1038 Photoreceptor

MSDS No.: 0311A

Section IV - Physical Data

Appearance/Odor: Solid / Odorless
Boiling Point: N.A.
Solubility in Water: Insoluble
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H_2O = 1): N.A.
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Carbon dioxide, Foam

Special Fire Fighting Procedures: When in a machine, treat as an electrical fire.

Fire and Explosion Hazards: Exposure to high temperatures can result in melting and pyrolysis. Fumes may cause respiratory symptoms. Delayed effects may occur up to 72 hours.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Oxides of Selenium, Arsenic and Tellurium.

Incompatability (Materials to Avoid): Strong Acids

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: None required when used as intended in Xerox equipment.

Section VIII - Special Precautions

Handling and Storage: Use wet pumicing and polishing procedures.

Conditions to Avoid: Avoid exposure to high temperatures

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Particles of coating detached through physical damage must be collected and disposed of as a chemical waste.

Waste Disposal Method: Return used or damaged photoreceptor to Xerox or supplier. Under present EPA Regulations, it is not classified as a hazardous waste. However, disposal in a chemical waste landfill is recommended. Insure conformity with federal, state and local regulations.

AR200756

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A.
ID Number: N. A.

INDUSTRIAL PETROCHEMICALS, INC.
128 Doremus Avenue
Newark, New Jersey 07105
Tel: (201) 589-1450

MAB PAINTS

T772

MATERIAL SAFETY DATA SHEET

MSDS NUMBER ▶ 7,570-3 PAGE

97367 (4-85)

24 HOUR EMERGENCY ASSISTANCE	GENERAL MSDS ASSISTANCE
SHELL: 713-473-9461 CHEMTREC: 800-424-9300	SHELL: 713-241-4819

ACUTE HEALTH *	FIRE	REACTIVITY	HAZARD RATING ▶
2	2	0	LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4

*For acute and chronic health effects refer to the discussion in Section III

BE SAFE
READ OUR PRODUCT SAFETY INFORMATION ... AND PASS IT ON
(PRODUCT LIABILITY LAW REQUIRES IT)

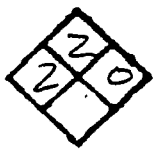
SECTION I

	NAME
PRODUCT ▶	MINERAL SPIRITS 145-EC
CHEMICAL NAME ▶	NOT APPLICABLE
CHEMICAL FAMILY ▶	HYDROCARBON SOLVENT
SHELL CODE ▶	83063

PAINT THINNER
MAB 090-032
RECEIVED

SECTION II-A PRODUCT/INGREDIENT

NO.	COMPOSITION	CAS NUMBER	PERCENT
P	MINERAL SPIRITS 145-EC	MIXTURE*	100
1	SOLVENT NAPHTHA (PETROLEUM), MEDIUM ALIPHATIC	64742-88-7	>90
2	SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	64742-95-6	<10
--	----------TYPICAL DISTRIBUTION----------		
.	PARAFFINS	NOT APPL.	52.9
.	NAPHTHENES	NOT APPL.	38.9
.	TOTAL AROMATICS	NOT APPL.	8.2
.	(TRIMETHYLBENZENE ..... 2.3-2.7)	25551-13-7	--
.	(ETHYLTOLUENE ..... 0.9-1.1)	25550-14-5	--
.	OLEFINS	NOT APPL.	<0.1



TYPE G
UN 1263

*A COMPLEX COMBINATION OF PREDOMINATELY C8-C12 HYDROCARBONS; EXACT COMPOSITION WILL VARY.

SECTION II-B ACUTE TOXICITY DATA

NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		
1*	>25 ML/KG (RAT)	>4 ML/KG (RABBIT)	>700 PPM/4H (RAT)
2*	4.7 G/KG (RAT)	>4 ML/KG (RAT)	>3670 PPM/8H (RAT)

*BASED UPON TESTING OR EITHER PRODUCT OR ESSENTIALLY SIMILAR PRODUCTS.

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

AR200757

EYE CONTACT
LIQUID IS MINIMALLY IRRITATING TO THE EYES. HIGH VAPOR CONCENTRATIONS MAY CAUSE IRRITATION.

SKIN CONTACT
LIQUID IS SLIGHTLY IRRITATING TO THE SKIN. PROLONGED OR REPEATED LIQUID CONTACT CAN RESULT IN DEFATTING AND DRYING OF THE SKIN WHICH MAY RESULT IN SKIN IRRITATION AND DERMATITIS.

INHALATION
VAPORS MAY BE IRRITATING TO NOSE, THROAT AND RESPIRATORY TRACT. HIGH VAPOR CONCENTRATIONS MAY CAUSE CNS DEPRESSION.

INGESTION
INGESTION OF PRODUCT MAY RESULT IN VOMITING: ASPIRATION (BREATHING) OF VOMITUS INTO THE LUNGS MUST BE AVOIDED AS EVEN SMALL QUANTITIES MAY RESULT IN ASPIRATION PNEUMONITIS.

SIGNS AND SYMPTOMS
IRRITATION AS NOTED ABOVE. EARLY TO MODERATE CNS (CENTRAL NERVOUS SYSTEM) DEPRESSION MAY BE EVIDENCED BY GIDDINESS, HEADACHE, DIZZINESS AND NAUSEA; IN EXTREME CASES, UNCONCIOUSNESS AND DEATH MAY OCCUR. ASPIRATION PNEUMONITIS MAY BE EVIDENCED BY COUGHING, LABORED BREATHING AND CYANOSIS (BLUISH SKIN); IN SEVERE CASES DEATH MAY OCCUR.

AGGRAVATED MEDICAL CONDITIONS
PREEXISTING EYE, SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

SEE SECTION VI FOR SUPPLEMENTAL INFORMATION.

SECTION IV — OCCUPATIONAL EXPOSURE LIMITS

NO.	OSHA PEL/TWA	OSHA PEL/CEILING	ACGIH TLV/TWA	ACGIH TLV/STEL	OTHER
P*	500 PPM		100 PPM	200 PPM	

*RECOMMEND THAT LIMITS FOR STODDARD SOLVENT BE USED AS A GUIDE.

SECTION V — EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT
FLUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

SKIN CONTACT
REMOVE CONTAMINATED CLOTHING/SHOES. FLUSH SKIN WITH WATER. FOLLOW BY WASHING WITH SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION. DO NOT REUSE CLOTHING UNTIL CLEANED.

INHALATION
REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION.

INGESTION
DO NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. GET MEDICAL ATTENTION.*

NOTE TO PHYSICIAN
*IF MORE THAN 2.0 ML PER KG HAS BEEN INGESTED AND VOMITING HAS NOT OCCURRED, EMESIS SHOULD BE INDUCED WITH SUPERVISION. KEEP VICTIM'S HEAD BELOW HIPS TO PREVENT ASPIRATION. IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX, CONVULSIONS OR UNCONSCIOUSNESS OCCUR BEFORE EMESIS, GASTRIC LAVAGE USING A CUFFED ENDOTRACHEAL TUBE SHOULD BE CONSIDERED.

SECTION VI — SUPPLEMENTAL HEALTH INFORMATION

MALE RATS EXPOSED FOR 90 DAYS BY INHALATION TO VAPORS OF SOLVENTS SIMILAR TO COMPONENT 1 SHOWED EVIDENCE OF KIDNEY DAMAGE. THE RELEVANCE OF THIS EFFECT TO MAN IS UNKNOWN. IN ONE OF THE STUDIES A LOW GRADE ANEMIA WAS ALSO OBSERVED.

RATS EXPOSED FOR 4 MONTHS TO 1700 PPM OF A SOLVENT SIMILAR TO COMPONENT 2 SHOWED EVIDENCE OF MILD DAMAGE TO THE LIVER, LUNGS AND KIDNEYS. THESE EFFECTS WERE NOT SEEN IN RATS EXPOSED FOR 1 YEAR TO 350 PPM OF ANOTHER SIMILAR SOLVENT.

SECTION VII PHYSICAL DATA

BOILING POINT: 317-388 (DEG F)

SPECIFIC GRAVITY: 0.78 (H2O=1)

VAPOR PRESSURE: <5* @ (MM HG) 100 DEG. F

MELTING POINT: NOT AVAILABLE (DEG F)

SOLUBILITY: (IN WATER) NEGLIGIBLE

VAPOR DENSITY: 4.8* (AIR=1)

EVAPORATION RATE (N-BUTYL ACETATE = 1): <0.1*

* ESTIMATED

APPEARANCE AND ODOR: LIGHT COLORED LIQUID. HYDROCARBON ODOR.

SECTION VIII FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD:
112 DEG. F (TCC)

FLAMMABLE LIMITS /% VOLUME IN AIR
LOWER: 1 UPPER: 6

EXTINGUISHING MEDIA
USE WATER FOG, FOAM, DRY CHEMICAL OR CO2. DO NOT USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SUFACE OF WATER.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS
CAUTION. COMBUSTIBLE. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS
CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME CONTACT SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER AS NEEDED TO PREVENT WEAKENING OF CONTAINER STRUCTURE.

SECTION IX REACTIVITY

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID:
AVOID HEAT, FLAME AND CONTACT WITH STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS
CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

SECTION X EMPLOYEE PROTECTION

RESPIRATORY PROTECTION
AVOID PROLONGED OR REPEATED BREATHING OF VAPORS. IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SEC. IV) USE A NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS.

PROTECTIVE CLOTHING
AVOID CONTACT WITH EYES. WEAR SAFETY GLASSES OR GOGGLES AS APPROPRIATE. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. WEAR CHEMICAL-RESISTANT GLOVES AND OTHER CLOTHING AS REQUIRED TO MINIMIZE CONTACT.

AR200759

ADDITIONAL PROTECTIVE MEASURES
USE EXPLOSION-PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS. AIR-DRY CONTAMINATED CLOTHING IN A WELL VENTILATED AREA, THEN LAUNDER BEFORE REUSING.

SECTION XI ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES
CAUTION. COMBUSTIBLE. *** LARGE SPILLS *** ELIMINATE POTENTIAL SOURCES OF IGNITION. WEAR APPROPRIATE RESPIRATOR AND OTHER PROTECTIVE CLOTHING. SHUT OFF SOURCE OF LEAK ONLY IF SAFE TO DO SO. DIKE AND CONTAIN. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY, SAND, OR OTHER SUITABLE MATERIAL; PLACE IN NON-LEAKING CONTAINERS AND SEAL TIGHTLY FOR PROPER DISPOSAL. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE; DISPOSE OF FLUSH SOLUTION AS ABOVE. *** SMALL SPILLS *** TAKE UP WITH AN ABSORBENT MATERIAL AND PLACE IN NON-LEAKING CONTAINERS FOR PROPER DISPOSAL.

WASTE DISPOSAL
UNDER EPA - RCRA (40 CFR 261.21), IF THIS PRODUCT BECOMES A WASTE MATERIAL, IT WOULD BE IGNITABLE HAZARDOUS WASTE, HAZARDOUS WASTE NUMBER D001. REFER TO LATEST EPA OR STATE REGULATIONS REGARDING PROPER DISPOSAL.

ENVIRONMENTAL HAZARDS
UNDER EPA-CWA, THIS PRODUCT IS CLASSIFIED AS AN OIL UNDER SECTION 311. SPILLS INTO OR LEADING TO SURFACE WATERS THAT CAUSE A SHEEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER, 800-424-8802. EPA - COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT. UNDER EPA-CERCLA ("SUPERFUND") RELEASES TO AIR, LAND OR WATER MAY BE REPORTABLE TO THE NATIONAL RESPONSE CENTER, 800-424-8802 (CIRCUMSTANCES SURROUNDING THE RELEASE AND CLEANUP DETERMINE REPORTABILITY).

SECTION XII SPECIAL PRECAUTIONS

KEEP LIQUID AND VAPOR AWAY FROM HEAT, SPARKS AND FLAME. SURFACES THAT ARE SUFFICIENTLY HOT MAY IGNITE EVEN LIQUID PRODUCT IN THE ABSENCE OF SPARKS OR FLAME. EXTINGUISH PILOT LIGHTS, CIGARETTES AND TURN OFF OTHER SOURCES OF IGNITION PRIOR TO USE AND UNTIL ALL VAPORS ARE GONE. VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM THE HANDLING SITE; FLASH-FIRE CAN RESULT. KEEP CONTAINERS CLOSED WHEN NOT IN USE. USE WITH ADEQUATE VENTILATION.

CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, CAN CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, DRILL, GRIND, WELD OR PERFORM SIMILAR OPERATIONS ON OR NEAR CONTAINERS.

STATIC ELECTRICITY MAY ACCUMULATE AND CREATE A FIRE HAZARD. GROUND FIXED EQUIPMENT. BOND AND GROUND TRANSFER CONTAINERS AND EQUIPMENT.

SECTION XIII TRANSPORTATION REQUIREMENTS

DEPARTMENT OF TRANSPORTATION CLASSIFICATION: COMBUSTIBLE LIQUID
D.O.T. PROPER SHIPPING NAME: PETROLEUM NAPHTHA

OTHER REQUIREMENTS:
UN 1255. GUIDE SHEET 27.

SECTION XIV OTHER REGULATORY CONTROLS

THE COMPONENTS OF THIS PRODUCT ARE LISTED ON THE EPA/TSCA INVENTORY OF CHEMICAL SUBSTANCES

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

DATE PREPARED: OCTOBER 04, 1985

BE SAFE

READ OUR PRODUCT
SAFETY INFORMATION ...AND PASS IT ON
(PRODUCT LIABILITY LAW
REQUIRES IT)

JOHN P. SEPESI

SHELL OIL COMPANY
PRODUCT SAFETY AND COMPLIANCE
P. O. BOX 4320
HOUSTON, TX 77210

ZOECON

MATERIAL SAFETY DATA SHEET

ORIGINAL

NFPA Designatic

Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act of 1970 and shall not be used for any other purpose. Use or dissemination of all or any part of this information for any other purpose or purposes is illegal.

1260-00-R

SECTION 1 — MANUFACTURER

MANUFACTURER'S NAME	ADDRESS	EMERGENCY PHONE NO 24 HC
Zoecon Corporation	975 California Avenue P.O.Box 10975 Palo Alto, CA 94304	(415) 857-0172 COLLECT or CHEMTREC (800) 424-9300 or Local Poison Control Center

SECTION 2 — PRODUCT IDENTIFICATION

TRADE NAME AND SYNONYMS: PENTAC AQUAFLOW™

REGISTRATION NO: 20954 - 112

CHEMICAL FAMILY: Chlorinated cyclic hydrocarbon

SECTION 3 — HAZARDOUS INGREDIENTS

CHEMICAL NAME AND SYNONYMS	CAS No.	CHEMICAL FORMULA	WT %	TLV
Dienochlor	2227-17-0	$C_{10}Cl_{10}$	38%	
Inerts			62%	

SECTION 4 — PHYSICAL PROPERTIES

BOILING POINT (760 mm Hg)	100°C	SPECIFIC GRAVITY (WATER = 1)	1.27 - 1.28
MELTING POINT	-	BULK DENSITY (LBS/CU FT)	
VAPOR PRESSURE (mm Hg 20°C)	∿ 22mmHg	EVAPORATION RATE	N/A
VAPOR DENSITY (AIR = 1)	N/A	PERCENT VOLATILE BY VOLUME	
SOLUBILITY IN WATER	Dispersible	pH	5.0 - 5.2
APPEARANCE AND ODOR	Brown slurry, slight odor.	Other	

SECTION 5 — FIRE AND EXPLOSION HAZARD DATA

			LOWER	UPPER
FLASH POINT (TEST METHOD)	None	FLAMMABLE LIMITS (% BY VOLUME)		
AUTOIGNITION TEMPERATURE				

EXTINGUISHING MEDIA: As appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES & PERSONNEL PROTECTION: Wear self-contained breathing apparatus and full protective equipment.

AR200762

UNUSUAL FIRE AND EXPLOSION HAZARDS: Decomposition or oxidation of dry residue may release toxic chlorides including phosgene and/or chlorine.

SECTION 6 — HEALTH HAZARD DATA

ACUTE TOXICITY

		EPA Toxicity Category
Acute Oral - Rat	LD_{50} > 5,100mg/kg	IV
Acute Dermal - Rabbit	LD_{50} >20,100mg/kg	IV
Skin Irritation - Rabbit	Minimally Irritating	IV
Eye Irritation - Rabbit	Moderately Irritating	III

EFFECTS OF OVEREXPOSURE (ACUTE)

Causes moderate eye irritation.

ORIGINAL (Red)

EMERGENCY AND FIRST AID PROCEDURES

Eyes - Flush with a directed stream of water for at least 15 minutes. Consult physician if irritation persists.
Skin - Wash thoroughly with soap and water.
Ingestion - Call a physician or a poison control center. There is no specific antidote. Treat symptomatically. Induce vomiting if patient is alert, if not alert, empty stomach by lavage.

SECTION 7 — PERSONAL PROTECTION DATA

Avoid contact with eyes.
Avoid inhalation of spray mist.
Wash thoroughly after handling.

SECTION 8 — REACTIVITY DATA

STABILITY (NORMAL CONDITIONS)

(X) STABLE ( ) UNSTABLE

CONDITIONS TO AVOID

Extreme heat

INCOMPATIBILITY (MATERIALS TO AVOID)

Alkali, sodium, potassium, amines.

HAZARDOUS POLYMERIZATION

( ) MAY OCCUR (X) WILL NOT OCCUR

CONDITIONS TO AVOID

HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition by heat may release toxic chlorides including phosgene, hydrogen chloride and/or toxic elemental chlorine.

SECTION 9 — ENVIRONMENTAL PROTECTION DATA

ENVIRONMENTAL PRECAUTIONS

Do not contaminate water, food or feed by storage or disposal.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Adsorb spill on vermiculite or other absorbent material and dispose of in compliance with Federal, State and local regulations.

WASTE DISPOSAL PROCEDURES

Pesticide, spray mixture or rinsate must be disposed of according to Federal, State or local procedures. Triple rinse container and dispose of in a sanitary landfill.

AR200763

SECTION 10 — HANDLING AND STORAGE PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Use according to label directions.

PROPER SHIPPING NAME

PENTAC Aquaflow

DOT HAZARD CLASS

LABELS REQUIRED (IF NOT EXEMPTED)

( ) FLAMMABLE ( ) OXIDIZER ( ) CORROSIVE ( ) POISON ( )

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form approved
OMB No. 44-R1587

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

PPE B
UN 1219

SECTION I

MANUFACTURER'S NAME: Chemtronics Inc.	EMERGENCY TELEPHONE NO.: 582-3322 (516)
ADDRESS: 681 Old Willets Path, Hauppauge, NY 11778	
CHEMICAL NAME AND SYNONYMS:	TRADE NAME AND SYNONYMS: Plast-N-Glas C8400/C6400
CHEMICAL FAMILY:	FORMULA:

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST Isopropyl Alcohol	19	200	ALLOYS		
VEHICLE Ammonium	0.25	25	METALLIC COATINGS		
SOLVENTS Dichlorodiflouromethane		1000	FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
NONE		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	176F	SPECIFIC GRAVITY (H_2O=1)	0.98
VAPOR PRESSURE (mm Hg.) @ 77F	520	PERCENT, VOLATILE BY VOLUME (%)	99+
VAPOR DENSITY (AIR=1)	1.7	EVAPORATION RATE (_____ =1)	2+
SOLUBILITY IN WATER	SL Soluble		
APPEARANCE AND ODOR	Clear solution - pleasant floral odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	NONE	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA	N/A			
SPECIAL FIRE FIGHTING PROCEDURES	NONE			
UNUSUAL FIRE AND EXPLOSION HAZARDS	NONE			

RECEIVED
AR200764

(Continued on reverse side)

Form OSHA-20
Rev. May 72

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

400 ppm

EFFECTS OF OVEREXPOSURE

Acute vapor irritates eyes, nose and throat. Liquid will damage eye tissue

AR200765

Prolonged and or repeated skin contact may be irritating

EMERGENCY AND FIRST AID PROCEDURES

Rinse skin with copious water. If eye contact occurs, flush with water and or delute with boric acid solution and call a physican. If overcome by vapors, remove to fresh air and if necessary give artifical respiration.

SECTION VI - REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID N/A
	UNSTABLE		
	STABLE	X	

INCOMPATIBILITY *(Materials to avoid)*

Alkylene oxids, acid anhydrides, inorganic acids, organic acids halogens possible -

HAZARDOUS DECOMPOSITION PRODUCTS

For propellout-hydrochlorie and hydrofluoric acid carbonyl fluoride

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		Not applicable
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Flush area with water, eliminate sources of ignition

WASTE DISPOSAL METHOD

Consult a disposal expert and ensure conformity to local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*

If used in a non ventilated area, use approved respiratory protection

VENTILATION	LOCAL EXHAUST	SPECIAL
	If heated or used in confined spaces	N/A
	MECHANICAL *(General)*	OTHER N/A

PROTECTIVE GLOVES	EYE PROTECTION
None should be needed	Safety glasses should be worn

OTHER PROTECTIVE EQUIPMENT

None should be needed

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep container closed when not in use. Do not handle or store near flame or strong oxidants adequate ventialation required Observe all hazard outlined in this sheel

OTHER PRECAUTIONS

None known to Chemtronics

GPO 934-190

ORIGINAL (Red)

TECH SPRAY
PO Box 949·Amarillo, Texas 79105
(806) 372-8523 - Telex 738450
Texas (800) 692-4677 • Outside Texas (800) 858-4043

MATERIAL SAFETY DATA SHEET

PREPARER: G. Unruh

PREPARATION/REVISION DATE: 12-12-85

SECTION I

PRODUCT NAME (as it appears on label): Instant Kleen All	PRODUCT NUMBER: 1604-8S, 16S, 24S
EMERGENCY TELEPHONE NO.: 1-806-372-8523	MANUFACTURER'S D-U-N-S NO.: 04-234-1578
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 172 101) SECONDARY: Compressed Gas N.O.S. Non-Flammable Gas UN 1956/1,1,1 Trichloroethane ORM-A UN2831	
LISTED WITH ROCKY MOUNTAIN POISON CONTROL DATA BASE? Yes	
CHEMICAL FAMILY: Solvent Degreasers	FORMULA: see section II

SECTION II — HAZARDOUS INGREDIENTS

CAS REGISTRY NO.	%W	CHEMICAL NAME(S)	Listed as a Carcinogen in NTP, IARC or OSHA 1910(z) (specify)
71-55-6	75.0	1,1,1 Trichloroethane	No
124-38-9	1.25	Carbon Dioxide	No
		PPE B	
		UN 2831	

RECEIVED AUG 01 1986 G. MURAWCZYK

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES
Reactive alkali metals.

SECTION III — PHYSICAL DATA (COLD FILL ONLY)

BOILING POINT: 74 °F 165 °C		SPECIFIC GRAVITY (H_2O = 1)	1.306		
VAPOR PRESSURE @ ___ °F 20 °C ☒ mm Hg ☐ psi	100	PERCENT VOLATILE BY VOLUME (%)	100	PERCENT SOLID BY WEIGHT (%)	0.00
VAPOR DENSITY (AIR = 1)	4.55	EVAPORATION RATE (n-butyl acetate=1) but.acet.	6.0		
SOLUBILITY IN WATER	insol.	pH = N/A			
APPEARANCE AND ODOR: Clear water white liquid, low odor				IS MATERIAL: ___ LIQUID ___ SOLID GAS PASTE POWDER AEROSOL	

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

FLASH POINT ___ °F ___ °C method used: None T.C.C.	FLAMMABLE LIMITS: N/A	LEL: N/A	UEL: N/A
EXTINGUISHING MEDIA: N/A			
SPECIAL FIRE FIGHTING PROCEDURES: None			
UNUSUAL FIRE AND EXPLOSION HAZARDS: Do not store aerosol cans in direct sunlight or above 120°F.			

AR200766

NA NOT APPLICABLE
NL NOT LISTED

(continued on reverse side)

NE NOT ESTABLISHED
NIF NO INFORMATION FOUND

ORIGINAL (Red)

SECTION V — HEALTH HAZARD DATA

ACUTE EFFECTS OF EXPOSURE Inhalation: Lightheadedness	ACGIH TLV 513 PPM
Eyes and skin: Mild irritation and	OSHA PEL NE
defatting	
CHRONIC EFFECTS OF EXPOSURE NE	
PRIMARY ROUTES OF ENTRY Inhalation X Skin Contact X Other (specify)	
EMERGENCY AND FIRST AID PROCEDURES Inhalation: Move to fresh air. Eyes and skin: Flush with clear water	
for 15 minutes. If IRRITATION persists, seek medical attention.	
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: NIF	

SECTION VI — REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	XX	
INCOMPATIBILITY (materials to avoid) Reactive alkali metals			
HAZARDOUS DECOMPOSITION PRODUCTS: Forced combustionL HCl, $COCl_2$, CO			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	XX	

SECTION VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Pick up on suitable absorbant, and place in proper waste receptacle.

WASTE DISPOSAL METHOD
Consignment to reclaimer.

SECTION VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type) none		
VENTILATION	LOCAL EXHAUST (Specify Rate) X7ft. ^{3}/min.	SPECIAL
	MECHANICAL (General) (Specify Rate)	OTHER
PROTECTIVE GLOVES (specify type) BUNA rubber	EYE PROTECTION (specify type) Safety glasses	
OTHER PROTECTIVE EQUIPMENT None		

SECTION IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Do not spray near electrical arc or open flame.

AR200767

OTHER PRECAUTIONS
Do not store in direct sunlight or above 120°F.

FORM NO FE 2

NA NO APPLICABLE
NL NOT LISTED
NE NOT ESTABLISHED
NIF NO INFORMATION FOUND

MATERIAL SAFETY DATA SHEET

Consumer Products Division, Division of Borden, Inc.
180 EAST BROAD STREET, COLUMBUS, OHIO 43215

Emergency Telephone
(614) 457-5200
(OPERATION ALERT)

THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200 REQUIRES THAT THE INFORMATION CONTAINED ON THIS SHEET BE MADE AVAILABLE TO YOUR WORKERS.

INSTRUCT YOUR WORKERS TO HANDLE THIS PRODUCT PROPERLY

NAME: **KRYLON CRYSTAL CLEAR SPRAY COATING**
TYPE: **AEROSOL ACRYLIC SPRAY** **22-Nov-85**
APPLICATION: **ITEMS 1301, 1302, 1303, 1304**

SIGNAL WORD—DANGER!

THIS MATERIAL IS A "HEALTH HAZARD" AND/OR A "PHYSICAL HAZARD" AS DETERMINED WHEN REVIEWED ACCORDING TO THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION 29 CFR PART 1910.1200 "HAZARD COMMUNICATION" STANDARD

CHEMICAL HAZARD RATING

HEALTH=2(MODERATE)
FIRE=4(EXTREME)
REACTIVITY=0(LEAST)

29CFR1910.1200 HAZARDOUS INGREDIENTS/REPORTED HEALTH EFFECTS

CAS REGISTRY NO. MATERIAL DESCRIPTION % BY WT.

67-64-1 ACETONE 11.2
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, UNCONSCIOUSNESS AND EVEN ASPHYXIATION.
ACGIH EXPOSURE LIMIT: 750 PPM, 8-HR TWA
OSHA 29CFR1910 EXPOSURE LIMIT: 1000 PPM, 8-HR TWA
NIOSH DOCUMENT NUMBER: 78-173

74-98-6 PROPANE 12.9
THIS MATERIAL IS A SIMPLE ASPHYXIANT. SIGNS AND SYMPTOMS OF OVEREXPOSURE INCLUDE CYANOSIS, RESPIRATORY DISTRESS, HEADACHE, DIZZINESS, DROWSINESS, UNCONSCIOUSNESS AND ASPHYXIATION.
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.
ACGIH EXPOSURE LIMIT: SEE ACGIH TLVS, APPENDIX E
OSHA 29CFR1910 EXPOSURE LIMIT: 1000 PPM, 8-HR TWA

75-28-5 ISOBUTANE 17.1

108-88-3 TOLUENE 11.1
OVEREXPOSURE MAY CAUSE LIVER DAMAGE.
OVEREXPOSURE MAY CAUSE KIDNEY DAMAGE.
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, UNCONSCIOUSNESS AND EVEN ASPHYXIATION.
ACGIH EXPOSURE LIMIT: 100 PPM, 8-HR TWA
OSHA 29CFR1910 EXPOSURE LIMIT: 200 PPM, 8-HR TWA
NIOSH DOCUMENT NUMBER: 73-11023

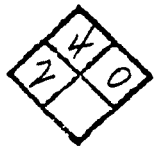
142-82-5 HEPTANE 22.4
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, UNCONSCIOUSNESS AND EVEN ASPHYXIATION.
ACGIH EXPOSURE LIMIT: 400 PPM, 8-HR TWA
OSHA 29CFR1910 EXPOSURE LIMIT: 500 PPM, 8-HR TWA
NIOSH DOCUMENT NUMBER: 77-151

1330-20-7 XYLENE 15.8
OVEREXPOSURE MAY CAUSE LIVER DAMAGE
OVEREXPOSURE MAY CAUSE KIDNEY DAMAGE.
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, UNCONSCIOUSNESS AND EVEN ASPHYXIATION.
ACGIH EXPOSURE LIMIT: 100 PPM, 8-HR TWA
OSHA 29CFR1910 EXPOSURE LIMIT: 100 PPM, 8-HR TWA
NIOSH DOCUMENT NUMBER: 75-168

64742-94-5 HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM) 2.1
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, UNCONSCIOUSNESS AND EVEN ASPHYXIATION.

PHYSICAL DATA

VAPOR PRESSURE — SEE CAN PRESSURE
VAPOR DENSITY HEAVIER THAN AIR
SOLUBILITY IN WATER — SLIGHT
SPECIFIC GRAVITY LIGHTER THAN WATER
EVAP RATE FASTER THAN BUTYL ACETATE
BOILING POINT; APPEARANCE; ODOR—N.A.
PERCENT VOLATILE BY WEIGHT: 94
PERCENT NON-VOLATILE BY WEIGHT: 6
PRESSURE IN CONTAINER, PSIG @ 70 F. APPROX. 60



PPE B
UN 1263

ACUTE HEALTH HAZARD DATA

SKIN ABSORPTION: NO HAZARDS KNOWN TO BORDEN
INGESTION: MAY BE HARMFUL IF SWALLOWED.
INHALATION: MAY BE HARMFUL IF INHALED. LIQUID OR VAPOR CAN CAUSE IRRITATION OF NOSE, THROAT AND LUNGS.
SKIN: CAUSES IRRITATION.
EYES: CAUSES IRRITATION.

HANDLING PRECAUTIONS

INHALATION: AVOID BREATHING VAPOR OR MIST.
USE WITH ADEQUATE VENTILATION.
SKIN: AVOID CONTACT WITH SKIN.
EYES: AVOID CONTACT WITH EYES.
WASH THOROUGHLY AFTER HANDLING.

EMERGENCY AND FIRST AID PROCEDURES

INTERNAL: IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE TO FRESH AIR.
SKIN CONTACT: FLUSH SKIN WITH WATER. IF IRRITATION PERSISTS, CALL A PHYSICIAN.
EYE CONTACT: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN.

SEE REVERSE SIDE

RECEIVED
AUG 1 4 1980
C. MIRAWCZ
AR200768

DISCLAIMER—SEE REVERSE SIDE

FIRE AND EXPLOSION HAZARD DATA

EXTREMELY FLAMMABLE.

CONTENTS UNDER PRESSURE; EXPOSURE TO HIGH TEMPERATURE MAY CAUSE BURSTING. AVOID RADIATORS, STOVES, DIRECT SUNLIGHT, OR OTHER HEAT SOURCE.

DO NOT PUNCTURE OR INCINERATE CONTAINER.

DO NOT SPRAY NEAR OPEN FLAME.

REACTIVITY DATA

NORMALLY STABLE AS DEFINED IN FNPA 704-12(4-3.1).

MAJOR DECOMPOSITION PRODUCTS: CO, CO_2

SPECIAL PROTECTION INFORMATION

APPROVED RESPIRATORY PROTECTION REQUIRED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL.

USE GOGGLES OR FACE SHIELD IF SPLASHING IS LIKELY.

WEAR IMPERVIOUS GLOVES AS REQUIRED TO PREVENT SKIN CONTACT.

WEARING SAFETY GLASSES, SAFETY SHOES, HARD HATS AND SUITABLE CLOTHING IS STANDARD PRACTICE IN MANY INDUSTRIAL OPERATIONS.

SPILL OR LEAK PROCEDURES

ELIMINATE ALL IGNITION SOURCES.

SOAK UP WITH ABSORBENT MATERIAL AND REMOVE TO A CHEMICAL DISPOSAL AREA.

PREVENT ENTRY INTO NATURAL BODIES OF WATER.

WASTE DISPOSAL METHOD

DISPOSE OF ACCORDING TO LOCAL, STATE, AND FEDERAL REQUIREMENTS.

EMPTY CONTAINER: MAY CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEARBY. INCINERATION WILL CAUSE CONTAINER TO BURST VIOLENTLY.

STORAGE PRECAUTIONS

DO NOT STORE AT TEMPERATURES OVER 120 F.

DOT CLASSIFICATION

ORM-D CONSUMER COMMODITY

ORIGINAL
(Red)

NOR (M) KD-1301 11/13/85

DISCLAIMER

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY BORDEN, except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States patent. The information provided herein was believed by Borden to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

AR200769

PJM

MATERIAL SAFETY DATA SHEET

PRODUCT NAME Lectra Clean (Aerosol) #2018	# MSDS002018
MANUFACTURED BY: CRC CHEMICALS	Phone (215) 674-4300
885 LOUIS DRIVE, WARMINSTER, PA. 18974	

1. INGREDIENTS

	CAS #	ACGIH TLV	OSHA PEL	Other Limits	%
1,1,1 Trichloroethane	71-55-6	350	350		72
Perchloroethylene	127-18-4	50	100		24
Carbon Dioxide	124-38-9	5000			4

PPB B

UN 2831

2. PHYSICAL DATA (Does not include carbon dioxide propellent)

Specific Gravity 1.385 (77°F)	Vapor Pressure 85 mm	% Volatile 100
Boiling Point 165--252°F	Evaporation Rate Rapid	
Freezing Point NA	Vapor Density 4.8 (Air = 1)	

Appearance and Odor Colorless liquid - Irritating odor at high conc.

Solubility Slight solubility in water - good solvent for many organic materials

3. FIRE AND EXPLOSION DATA

Flashpoint None	Method TCC, TOC, COC	Flammable Limits 212°F
Extinguishing Media Water fog		LEL 7.5 UEL 14.5%

Unusual Hazards Aerosols may explode if their temperature exceeds 130°F

4. REACTIVITY AND STABILITY

Stability Good - Avoid exposures to open flames, arcs and high temp.

Hazardous decomposition products Thermal - Hydrogen chloride, chlorine & some phosgene

Materials to avoid Avoid storage in aluminum containers or contact with aluminum and zinc powder.

5. PROTECTION INFORMATION

Ventilation Maintain vapor concentration below TLV - Use mechanical means if necessary

Respiratory Above TLV use self contained air mask or vapor mask

AR200770

Gloves Solvent resistant	Eye & Face Safety glasses

Other Protective Equipment Not normally required for aerosol products.

ORIG
(Re

MSDS002018

6. HEALTH HAZARD DATA

Primary Routes of Entry Inhalation and skin contact

Signs and Symptoms of Exposure

1. Acute Overexposure Inhalation - headaches, dizziness, anesthesia, unconsciouness. Eyes - causes pain and some irritation. Skin--causes irritation on repeated exposures

2. Chronic Overexposure Repeated overexposures may cause liver and kidney effects.

Medical Conditions Generally Aggravated by Exposure High levels (8000 ppm +) of vapor may cause cardiac arrthymias

Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Program	Yes ☐ No ☒	IARC Monographs	Yes ☐ No ☒	OSHA	Yes ☐ No ☒

Emergency and First Aid Procedures (If symptoms persist, call a physician)

1. Inhalation Remove to fresh air, apply artificial respiration if necessary.
2. Eyes Flush for 15 minutes with large amounts of water.
3. Skin Remove contaminated clothing. Wash exposed skin with soap.
4. Ingestion Do not induce vomiting - Call a physician.

7. SPILL OR LEAK PROCEDURES

Precautions to be taken in Handling and Storage Store in a cool dry area.

Steps to be taken in case Materials is released or spilled Usually not a problem with aerosols - Area should be ventilated and absorbent used to pick up excess material.

Waste Disposal Discarded filled cans or partially used cans are Hazardous Waste - Dispose of in conformance to Regulations

8. SPECIAL PRECAUTIONS AND USE DIRECTIONS

Avoid prolonged skin contact or breathing of vapors. Since vapors are heavier than air, aerosols should not be used in confined areas or low spots without adequate ventilation. If vapors are suspected in a low area, do not enter unless special breathing apparatus is used and an observer is present for assistance.

Keep aerosols away from heat.

AR200771

PREPARED BY: A. P. Reed

ORIGINAL DATE OR DATE OF REVISION Nov. 1985

Gillette Medical Evaluation Laboratories
1413 Research Boulevard
Rockville, Maryland 20850
301-424-2000

NFPA704M HAZARD RATING

Fire: NA
Health: NA
Reactivity: NA
Other: NA

MATERIAL SAFETY DATA SHEET

NAME: PAPER MATE OFFICE PRODUCTS CORRECTION FLUID

CAS NO: NA

REVISION 1
Effective Date: February 13, 1985

A. – IDENTIFICATION

Composition*	%	
1,1,1-Trichloroethane (71-55-6) Titanium Dioxide (13463-67-7) Resins, Dispersants, Solvents		Formula: NA Molecular Weight: NA Synonyms: Liquid Paper, Correction Fluid

PPE A
UN NA

RECEIVED
AUG 1 1 1986

B. – PHYSICAL DATA

Boiling Point	Melting Point	Freezing Point
165 °F 74 °C	NA °F NA °C	NA °F NA °C
Specific Gravity (H_2O=1)	**Vapor Density (air=1)**	**Vapor Pressure @ 68 °F**
1.32	4.55	100 mmHg
Evaporation (Ether =1)	**Saturation in Air** (by volume @ °F)	**Autoignition Temperature**
~2.7	NA %	°F °C NA
% Volatiles (by volume)	**Solubility in Water**	
~65	< 1%	pH NA

Appearance/Odor	White or colored fluid, solvent odor
Flash Point and Test Method(s)	None
Flammable Limits in Air (% by volume)	(@25°C High energy ignition source) Lower 8.0 % Upper 10.5 %

C. – REACTIVITY

Stability		Conditions to Avoid	Polymerization		Conditions to Avoid
stable	X	NA	may occur		NA
unstable			will not occur	X	

Incompatible Materials	For solvent: caustics, aluminum, barium, magnesium, zinc, sodium, potassium
Hazardous Decomposition Products	Thermal degradation, e.g. open flame, can produce small amounts of phosgene, hydrogen chloride and chlorine

*IF MULTIPLE INGREDIENTS INCLUDE CAS NUMBERS FOR EACH

NA=NOT AVAILABLE

Footnotes: Physical data refers to solvent.

AR200772

GMEL #412

D. — HEALTH HAZARD DATA

Occupational Exposure Limits (PEL'S, TLV'S, etc.)

8 hr. TWA for 1,1,1-Trichloroethane = 350 ppm (OSHA, ACGIH). Not anticipated under foreseeable use conditions.

Warning Signals

NA

Routes/Effects of Exposure

1. Inhalation None anticipated under foreseeable use conditions. If vapors are deliberately concentrated and inhaled (abuse) following symptoms may occur: respiratory irritation, dizziness, drowsiness, headache, nausea, unconsciousness, cardiac sensitization, coma and death.

2. Ingestion

None anticipated under foreseeable use conditions. Depending on amount ingested most of the symptoms described above may occur. LD_{50} in rats = >5 ml/kg.

3. Skin

a. Contact

None anticipated under use conditions. Irritation may occur if contact is prolonged/repeated.

b. Absorption

None anticipated under foreseeable use conditions. Solvent can be absorbed through skin (prolonged contact), but not likely in toxic amounts.

4. Eye Contact

Irritation

5. Other

NA

E. — ENVIRONMENTAL IMPACT

1. Applicable Regulations

2. DOT Hazard Class — NA
3. DOT Shipping Name —

ORIGINAL (Red)

Environmental Effects

NA

AR200773

F. — EXPOSURE CONTROL METHODS

Engineering Controls

None under normal use conditions.

Eye Protection

None under normal use conditions

Skin Protection

None under normal use conditions

Respiratory Protection

None under normal use conditions

Other

Product is non-hazardous when used as directed in an office/room with normal air circulation.

G. — WORK PRACTICES

Handling and Storage

No unusual handling or storage when used as directed; when stored in large quantities (as in warehouse), it should be in a well-ventilated, cool area.

Normal Clean Up

Pick up spills with towels, tissues, etc. and place in trash.

Waste Disposal Methods

Dispose as regular trash.

AR200774

H. EMERGENCY PROCEDURES

Steps to be taken if material is released to the environment or spilled in the work area

Not applicable

ORIGINAL
(Red)

Fire and Explosion Hazard	Extinguishing Media
Hazardous decomposition products	As for adjacent fire, dry chemical, foam, carbon dioxide

Firefighting Procedures

In fires involving large quantities of product use self-contained breathing apparatus.

I. – FIRST AID AND MEDICAL EMERGENCY PROCEDURES

Eyes

Flush with plenty of water. If irritation persists obtain medical attention.

Skin

Wash with soap and water.

Inhalation

None normally anticipated. In abuse situation remove to fresh air and consult physician immediately.

Ingestion

Consult physician.

Notes to Physician

Do not use sympathomimetic agents (e.g. epinephrine) in halogenated hydrocarbon poisoning because of possible induction of ventricular fibrillation.

AR200775

The information contained in the Material Safety Data Sheet is based on data considered to be accurate, however, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof.

penetone® CORPORATION
A Subsidiary of West Chemical Products, Inc.

74 HUDSON AVENUE, TENAFLY, NJ 07670
EMERGENCY TEL. NO. (201) 567-3000

MATERIAL SAFETY DATA SHEET

(Confidential Formula – Information not to be disclosed to other than recipient and other regulatory agencies.)

DATE September 8, 1985

SECTION I. PRODUCT IDENTIFICATION

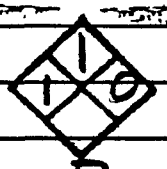
TRADE NAME
LUBRISIL

FORMULA
1,1,1-Trichloroethane, Silicone

CHEMICAL FAMILY
Aerosol lubricant

SECTION II. HAZARDOUS INGREDIENTS

COMPONENT OR MATERIAL CHEMICAL NAMES	CAS NO.	% by	TLV (Units)
1,1,1-Trichloroethane	71-55-6	92	350PPM



PPE B

UN 2831

RECEIVED
MAY 27 1986
C. MURAWCZYK

SECTION III. PHYSICAL DATA

BOILING POINT (°F) 165	VAPOR PRESSURE, mm Hg @ 20°C (68°F) (at 30°F) 144
EVAPORATION RATE (ETHER =1) 0.5	VAPOR DENSITY (AIR=1) @ 60-90°F Greater than 1
SOLUBILITY IN H_2O, % by wt @ 20°C (68°F) Insoluble	% VOLATILES by VOL. @ 70°F 92
SPECIFIC GRAVITY H_2O = 1 @ 75°F 1.320	pH N.A. (non-aqueous)

APPEARANCE & ODOR
Hazy liquid with chlorinated solvent odor (aerosol)

SECTION IV. FIRE AND EXPLOSION DATA

FLASH POINT (Method Used)	FLAMMABLE EXPLOSIVE LIMITS	UPPER	LOWER
None		N.A.	N.A.

EXTINGUISHING MEDIA
CO_2, dry powders (unlikely to burn)

SPECIAL FIRE FIGHTING PROCEDURES
Gas masks if product is decomposing. Caution against explosion of over heated cans.

UNUSUAL FIRE & EXPLOSION HAZARDS
Hydrochloric acid may be formed in combustion products.

SECTION V. EMERGENCY AND FIRST AID PROCEDURES

AH200776

EYES
Flush with water for 15 mins. Consult physician.

SKIN
Wash with soap and water and apply a good skin cream.

INHALATION
Remove to fresh air. Consult physician.

INGESTION
Do not induce vomiting; give plenty of milk. Consult physician.

FM-2401

SECTION VI. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

See Section II

EFFECTS OF OVEREXPOSURE:
INHALATION

Prolonged inhalation may have anesthetic effect.

SKIN

Will defat skin. May cause irritation on prolonged exposure.

EYES

Highly irritating to eyes on contact.

CHRONIC OVEREXPOSURE EFFECTS

Not ascertained.

SECTION VII. REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY

Product is stable.

INCOMPATIBILITY

Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS

Hydrochloric acid may form in the event of fire.

CONDITIONS CONTRIBUTING TO POLYMERIZATION

Will not occur.

SECTION VIII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Provide adequate ventilation; Hose down with water or seal with absorbent materials. Remove clothing, wet with product and wash before reuse.

NEUTRALIZING CHEMICALS

N.A.

WASTE DISPOSAL METHOD

Do not incinerate. Dispose of in accordance with local, state and federal EPA regulations.

SECTION IX. VENTILATION AND PERSONAL PROTECTIVE EQUIPMENT

VENTILATION REQUIREMENTS

Floor level fans are recommended.

SPECIAL PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY

None under normal use conditions.

EYE

Splash proof goggles.

GLOVES

Neoprene, if prolonged or repeated contact is anticipated.

OTHER CLOTHING & EQUIPMENT

Eye bath in area.

SECTION X. SPECIAL PRECAUTIONS INCLUDING STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE (Always refer to label directions when using.)

Keep away from heat (aerosol can). Use with adequate ventilation.

AR200777

Avoid contact with skin, eyes and clothing. Do not puncture can.

D.O.T. SHIPPING CLASSIFICATION

Compressed Gas, N.O.S. UN1956

The information presented herein has been compiled from sources considered to be dependable and accurate to the best of Penetone's knowledge. However, Penetone Corporation makes no warranty, express or implied, regarding the accuracy of such data or the results to

incomplete: needs reactivity data.

CHAPCO SEAM BOND SOLVENT

2 0

PRE NONE
UN 2831

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME: Chicago Adhesive Products Company	EMERGENCY TELEPHONE NO.: 312-581-1300
ADDRESS (Number, Street, City, State, and ZIP Code): 4658 W. 60th Street, Chicago, IL 60629	
CHEMICAL NAME AND SYNONYMS:	TRADE NAME AND SYNONYMS: 116 Solvent
CHEMICAL FAMILY:	FORMULA: Propietary

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS 1.1.1-Trichlorethane	97.5	350ppm	FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)

RECEIVED
APR 28 1987
C. MURAWCZYK

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	165	SPECIFIC GRAVITY (H_2O=1)	1.29
VAPOR PRESSURE (mm Hg.) @ 20°C	100	PERCENT, VOLATILE BY VOLUME (%)	99.5
VAPOR DENSITY (AIR=1)	4.5	EVAPORATION RATE (_____ =1)	5.5
SOLUBILITY IN WATER Negligible			
APPEARANCE AND ODOR Thin viscosity liquid			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) None	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES None			
UNUSUAL FIRE AND EXPLOSION HAZARDS None			

AR200778

(Continued on reverse side)

SECTION V · HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
350 ppm

EFFECTS OF OVEREXPOSURE
Slight anesthetic effect may occur in range of 500-1000 ppm. At higher concentra s dizziness, central nervous system depression may occur.

EMERGENCY AND FIRST AID PROCEDURES
Remove to fresh air; keep warm and quiet; if breathing has stopped, give artificial respiration, and summon medical aid.

SECTION VI · REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		Vapor laden air should not be permitted to contact
	STABLE		open flames, extremely hot surfaces or welding arcs.

INCOMPATABILITY *(Materials to avoid)*
Water-slow hydrolysis produces small amounts of corrosive acid.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	

SECTION VII · SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Return material to closed containers. Ventilate area.

WASTE DISPOSAL METHOD
Bury or allow solvent to evaporate at safe distance from habitation.

SECTION VIII · SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)* None required when used in adequately ventilated area. Hydrocarbon vapor cannister or self-contained breathing apparatus if needed.

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL *(General)* Provide to control TLV	OTHER

PROTECTIVE GLOVES	EYE PROTECTION
Not normally required	Not normally required

OTHER PROTECTIVE EQUIPMENT

SECTION IX · SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Close container after use.

OTHER PRECAUTIONS
Avoid breathing vapors over 350 ppm for extended periods or peak concentrations over 550 ppm

XEROX

Material Safety Data Sheet

MSDS No.: 0042
Date: Oct. 9, 1984
Revision Dec. 21, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038/2510 Black Toner

Part No. : 6R121, 6R122, 6R133, 6R234

Chemical Name: Thermoplastic powder

Ingredients	CAS No.
Styrene, Acrylate Copolymer (60-65%)	25213-39-2
Acrylic Resin (20-25%)	----------
Carbon Black (10-15%)	1333-86-4
Polyolefin (<10%)	----------
Amorphous Silica (<1%)	7631-86-9

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >6.6 mg/1 (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: non-sensitizing, non-irritating
Mutagenicity: No mutagenicity detected in Ames, Pol A + /A-, WP_2 and Micronucleus Assays.
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

PEL: 15 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

AR200780

[1]XEL: 5 mg/m³ (Total Dust)

Additional Information: *Not tested to the highest dose or concentration.

[1]XEL - Xerox Exposure Limit

N.A. - Not Applicable

Section IV - Physical Data

Appearance/Odor: Black powder / faint odor
Boiling Point: N.A.
Solubility in Water: Negligible
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. **% (Wgt.)** N.A. **% (Vol.)**

Softening Range: 85° C to 100° C
Melting Point: N.A.
Specific Gravity (H_2O = 1): 1
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits **LEL:** N.A. **UEL:** N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

ORIGINAL (Red)

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than in normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Loose toner can be removed using a vacuum cleaner. Residue can be removed with soap and cold water. After removal of loose toner, garments may be washed or dry-cleaned.

Waste Disposal Method: Do not incinerate. No special techniques beyond normal practice. Insure conformity with federal, state or local regulations.

AR200781

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N.A. **ID Number:** N.A.

XEROX

Material Safety Data Sheet

MSDS No.: 0043
Date: Oct. 9, 1984
Revision Sept. 19, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Blue Toner

Part No. : 6R124

Chemical Name: None

Ingredients	CAS No.
Styrene, Acrylate Copolymer (45-50%)	25213-39-2
Acrylic Resin (30-40%)	----------
Blue Pigment; Phthalocyanine Derivative (<10%)	----------
Polyolefin (<5%)	----------
Tin Oxides (<5%)	----------
Magenta Pigment; Quinoacridine Derivative (<2%)	----------
Amorphous Silica (<2%)	7631-86-9

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: No mutagenicity detected in Ames and Micronucleus Assays.
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m^3(Total Dust)
5mg/m^3 (Respirable Dust)

PEL: 15 mg/m^3 (Total Dust)
5mg/m^3 (Respirable Dust)

[1]XEL: 5 mg/m^3 (Total Dust)

AR200782

Additional Information: The information noted above is based on the toxicity data for 6500 and 2830 Toners. *Not tested to the highest dose or concentration.

[1]XEL - Xerox Exposure Limit

N.A. - Not Applicable

Section IV - Physical Data

Appearance/Odor: Blue powder / faint odor
Boiling Point: N.A.
Solubility in Water: Negligible
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: 85°C to 100°C
Melting Point: N.A.
Specific Gravity (H_2O = 1): 1
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

ORIGINAL (Red)

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than in normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Loose toner can be removed using a vacuum cleaner. Residue can be removed with soap and cold water. After removal of loose toner, garments may be washed or dry-cleaned.

Waste Disposal Method: Do not incinerate. No special techniques beyond normal practice. Insure conformity with federal, state or local regulations.

AR200783

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N.A.
ID Number: N.A.

XEROX

Material Safety Data Sheet

MSDS No.: 0045
Date: Apr. 12, 1985
Revision Sept. 19, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Brown Toner **Part No. :** 6R126

Chemical Name: None

Ingredients	CAS No.
Styrene Acrylate Copolymer (45-50%)	25213-39-2
Acrylic Resin (30-35%)	----------
Yellow Pigment; Acetylacetamide Derivative (<10%)	----------
Magenta Pigment; Quinoacridine Derivative (<5%)	----------
Polyolefin (<5%)	----------
Tin Oxides (<5%)	----------
Amorphous Silica (<1%)	7631-86-9

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: No mutagenicity detected in Ames and Micronucleus Assays.
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m^3(Total Dust)
5mg/m^3 (Respirable Dust)

PEL: 15 mg/m^3 (Total Dust)
5mg/m^3 (Respirable Dust)

AR200784

[1]XEL: 5 mg/m^3 (Total Dust)

Additional Information: The information noted above is based on the toxicity data for 6500 and 2830 Toners. *Not tested to the highest dose or concentration.

[1]XEL - Xerox Exposure Limit

Section IV - Physical Data

Appearance/Odor: Brown powder / faint odor
Boiling Point: N.A.
Solubility in Water: Negligible
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. **% (Wgt.)** N.A. **% (Vol.)**

Softening Range: 85°C to 100°C
Melting Point: N.A.
Specific Gravity (H_2O = 1): 1
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits **LEL:** N.A. **UEL:** N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than in normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Loose toner can be removed using a vacuum cleaner. Residue can be removed with soap and cold water. After removal of loose toner, garments may be washed or dry-cleaned.

Waste Disposal Method: Do not incinerate. No special techniques beyond normal practice. Insure conformity with federal, state or local regulations.

AR200785

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N.A. **ID Number:** N.A.

XEROX

Material Safety Data Sheet

MSDS No.: 0041
Date: Oct. 9, 1984
Revision Sept. 19, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Green Toner Part No. : 6R125

Chemical Name: None

Ingredients	CAS No.
Styrene, Acrylate Copolymer (60-65%)	25213-39-2
Acrylic Resin (20-25%)	----------
Polyolefin (<10%)	----------
Blue Pigment; Phthalocyanine Derivative (<5%)	----------
Yellow Pigment; Acetylacetamide Derivative (<5%)	----------
Amorphous Silica (<1%)	7831-86-7

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: No mutagenicity detected in Ames and Micronucleus Assays.
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m³(Total Dust)
5mg/m³ (Respirable Dust)

PEL: 15 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

[1]XEL: 5 mg/m³ (Total Dust)

AR200786

Additional Information: The information noted above is based on the toxicity data for 6500 and 2830 Toners. *Not tested to the highest dose or concentration.

[1]XEL - Xerox Exposure Limit

N.A. - Not Applicable

Section IV - Physical Data

Appearance/Odor: Green powder / faint odor
Boiling Point: N.A.
Solubility in Water: Negligible
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: 85°C to 100°C
Melting Point: N.A.
Specific Gravity (H_2O = 1): 1
Vapor Pressure (mm Hg): N.A.
pH = N.A.

ORIGINAL (Red)

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than in normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Loose toner can be removed using a vacuum cleaner. Residue can be removed with soap and cold water. After removal of loose toner, garments may be washed or dry-cleaned.

Waste Disposal Method: Do not incinerate. No special techniques beyond normal practice. Insure conformity with federal, state or local regulations.

Section X - Transportation Information

AR200787

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N.A.
ID Number: N.A.

XEROX

Material Safety Data Sheet

MSDS No.: 0040
Date: Oct. 9, 1984
Revision Sept. 19, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Red Toner Part No. : 6R123

Chemical Name: None

Ingredients	CAS No.
Styrene, Acrylate Copolymer (60-65%)	25213-39-2
Acrylic Resin (25-30%)	----------
Red Pigment; Barium Salt (<10%)	----------
Polyolefin (<5%)	----------
Magenta Pigment; Quinoacridine Derivative (<1%)	----------
Amorphous Silica (<1%)	7631-86-9

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: No mutagenicity detected in Ames and Micronucleus Assays.
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m^3(Total Dust)
5mg/m^3 (Respirable Dust)

PEL: 15 mg/m^3 (Total Dust)
5mg/m^3 (Respirable Dust)

AR200788

[1]XEL: 5 mg/m^3 (Total Dust)

Additional Information: The information noted above is based on the toxicity data for 6500 and 2830 Toners. *Not tested to the highest dose or concentration.

[1]XEL - Xerox Exposure Limit

N.A. - Not Applicable

Trade Name: 1025/1038 Red Toner

MSDS No.: 0040

Section IV - Physical Data

Appearance/Odor: Red powder / faint odor
Boiling Point: N.A.
Solubility in Water: Negligible
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: 85°C to 100°C
Melting Point: N.A.
Specific Gravity (H_2O = 1): 1
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than in normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Loose toner can be removed using a vacuum cleaner. Residue can be removed with soap and cold water. After removal of loose toner, garments may be washed or dry-cleaned.

Waste Disposal Method: Do not incinerate. No special techniques beyond normal practice. Insure conformity with federal, state or local regulations.

AR200789

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N.A.
ID Number: N.A.

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29CFR 1910. 1200. Standard must be consulted for specific requirements.

QUICK IDENTIFIER
Common Name: (used on label and list) QUELPYRE MASTIC

703B

0 1 0

PPE E

UN 1133

SECTION 1 -

Manufacturer's Name: Quelcor, Inc.

Address: 3765 Old Easton Road, Gate #1

Emergency Telephone No.: (215) 345-0100

City, State, and ZIP: Doylestown, Penna. 18901

Other Information Calls:

Signature of Person Responsible for Preparation (Optional):

Date Prepared: 6/3/86

SECTION 2 – HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Component(s) (chemical & common name(s))	OSHA PEL	ACGIH TLV	Other Exposure Limits	% (optional)	CAS NO.
Antimony Trioxide	--	.5	--	--	1309644

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point: Same as water.

Specific Gravity (H_2O=1): > 1.0

Vapor Pressure (mm Hg): (liquid phase) 17.4 @ 20°C.

Vapor Density (Air = 1): > 1 (heavier)

Solubility in Water: (liquid phase) Appreciable

Reactivity in Water: None

Appearance and Odor: (liquid phase) White Mastic, mild latex odor.

Melting Point: N/A

SECTION 4 – FIRE & EXPLOSION DATA

Flash Point: N/A °F. °C. Method Used: --

Flammable Limits in Air % by Volume: LEL Lower N/A UEL Upper N/A

Auto-Ignition Temperature: N/A

Extinguisher Media: Not applicable. Product is self-extinguishing.

Special Fire Fighting Procedures: Not Applicable

Unusual Fire and Explosion Hazards: Not Applicable

RECEIVED
SEP 19 1986
AR200790
C. MURAWCZYK

SECTION 5 – PHYSICAL HAZARDS (REACTIVITY DATA)

Stability: Unstable ☐ / Stable ☒ — Conditions to Avoid: Not applicable

Incompatability (Materials to Avoid): Strong Acids.

Hazardous Decomposition Products: Carbon monoxide and/or carbon dioxide and nitrogen.

Hazardous Polymerization: May Occur ☐ / Will Not Occur ☒ — Conditions to Avoid: Not Applicable

SECTION 6 – HEALTH HAZARDS

1. Acute: Direct eye contact may cause irritation.

2. Chronic: Prolonged skin contact may cause irritation.

Signs and Symptoms of Exposure: Treat symptomatically.

Medical Conditions Generally Aggravated by Exposure: None known.

Chemical Listed as Carcinogen or Potential Carcinogen — National Toxicology Program: Yes ☐ No ☒ — I.A.R.C. Monographs: Yes ☐ No ☒ — OSHA: Yes ☐ No ☒

Emergency and First Aid Procedures: See below.

ROUTES OF ENTRY

1. Inhalation: Remove to fresh air. Treat symptomatically.
2. Eyes: Immediately flush eyes with plenty of water for at least 15-minutes. Obtain physician if irritation persists.
3. Skin: Wash affected areas with soap and water. Remove contaminated clothing and wash before reuse.
4. Ingestion: Induce vomiting, obtain physician.

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage: Not applicable.

Other Precautions: Not applicable.

Steps to be Taken in Case Material is Released or Spilled: Uncontaminated material may be recovered and re-used. If contaminated, scoop into a receptacle for disposal.

Waste Disposal Methods (Consult federal, state, and local regulations): Allow material to dry. Dispose as solid waste in accordance with federal, state and local regulations.

SECTION 8 – SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection (Specify Type): Dust mask recommended with adequate ventilation if material is spray applicated. Use MSHA/NIOSH-type respirator in poorly ventilated areas.

Ventilation: Required — Local Exhaust: Use if needed to control vapor. — Mechanical (General): Expected to be satisfactory — Special: -- — Other: Ventilate enclosed spaces.

Protective Gloves: Impervious — Eye Protection: Safety glasses recommended.

Other Protective Clothing or Equipment: As necessary

Work/Hygienic Practices: Wash hands before eating, drinking or smoking.

IMPORTANT

Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.

AR200791

MONSANTO PRODUCT NAME

ROUNDUP® HERBICIDE

MONSANTO COMPANY
800 N. LINDBERGH BLVD.
ST. LOUIS, MO 63167

Emergency Phone No.
(Call Collect)
314-694-4000

PRODUCT IDENTIFICATION

Synonyms:	None.	
Chemical Name:	Not Applicable, Formulated Product	
Active Ingredient:	*Isopropylamine salt of glyphosate	41.0%
Inert Ingredients:		59.0%
		100.0%

**Contains 480 grams per liter or 4 pounds of the active ingredient isopropylamine salt of N-(phosphonomethyl) glycine per U.S. gallon. Equivalent to 356 grams per liter or 3 pounds per U.S. gallon of the acid, glyphosate.*

CAS Reg. No.:	Not Applicable, Formulated Product
CAS Reg. No. Active Ingredient:	38641-94-0
EPA Reg. No.:	524-308
DOT Proper Shipping Name:	Not Applicable
DOT Hazard Class/ I.D. No.:	Not Applicable
DOT Label:	Not Applicable
Reportable Quantity (RQ) Under Clean Water Act:	Not Applicable
U.S. Surface Freight Classification:	Weed Killing Compound, N.O.I.B.N.

The substance listed below is identified as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200):

Surfactant, about 15%. The specific chemical identity is withheld because it is trade secret information of Monsanto Company.

WARNING STATEMENTS

Keep out of reach of children.
WARNING!
CAUSES EYE IRRITATION
HARMFUL IF SWALLOWED
MAY CAUSE SKIN IRRITATION
NOT FOR REFORMULATION OR REPACKAGING

AR200792

PRECAUTIONARY MEASURES

Do not get in eyes, on skin or on clothing.
Wash thoroughly after handling.
Avoid direct applications to any body of water. Do not contaminate water by disposal of waste or cleaning of equipment.

EMERGENCY AND FIRST AID PROCEDURES

FIRST AID: IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Call a physician.

IF ON SKIN, immediately flush with plenty of water. Remove contaminated clothing. Wash clothing before reuse.

IF SWALLOWED, this product will cause gastrointestinal tract irritation. Immediately dilute by swallowing water or milk. Call a physician.

OCCUPATIONAL CONTROL PROCEDURES

Eye Protection: Wear chemical splash goggles during mixing/pouring operations or other activities in which eye contact with undiluted Roundup® herbicide is likely to occur.

Skin Protection: In cases in which prolonged or repeated skin contact with Roundup herbicide may occur, long-sleeved shirt, long pants, and chemical protective (e.g. rubber) gloves are recommended. Wash hands and contaminated skin after handling. Clothing soaked with Roundup solution should be promptly removed and laundered before reuse.

Respiratory Protection: Respiratory protection should not be required for normal use and handling. During periods of abnormal exposure to heavy spray or mist, use of NIOSH/MSHA approved equipment for pesticide vapor/mist is recommended. The respirator use limitations specified by NIOSH/MSHA or the manufacturer must be observed.

Ventilation: No specials precautions are recommended.

Airborne Exposure Limits: Product: Roundup Herbicide - 100% by wt.

OSHA PEL: None established
ACGIH TLV: None established

Surfactant ingredient: Approx. 15% by wt.

OSHA PEL: None established
ACGIH TLV: None established

FIRE PROTECTION INFORMATION

Flash Point: >200°F. ***Method:*** Tag Closed Cup

Extinguishing Media: Water spray, foam, dry chemical or CO_2 or any Class B extinguishing agent.

Special Firefighting Procedures: Firefighters and others who may be exposed to vapors or products of combustion should wear a self-contained breathing apparatus and full protective clothing. Equipment should be thoroughly cleaned after use.

AR200793

Unusual Fire and Explosion Hazards: None.

REACTIVITY DATA

Stability: Stable for at least 5 years under normal conditions of warehouse storage. Heated facilities are not required.

Incompatibility: This product and spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminum, fiberglass, plastic and plastic lined containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Does not occur. This product can react with caustic (basic) materials to liberate heat. This is not a polymerization but rather a chemical neutralization in an acid-base reaction.

HEALTH EFFECTS SUMMARY

The following information presents both human experience and the results of scientific experiments used by qualified experts to assess the effects of Roundup herbicide on the health of exposed individuals and to support the Precautionary Statements and Occupational Control Procedures recommended in this document. To avoid misunderstanding, the data provided in this section should be interpreted by individuals trained in evaluation of this type of information.

Human Experience

Dermal contact and inhalation are expected to be the primary routes of occupational exposure to Roundup herbicide. Direct contact with this material may cause temporary eye irritation and conjunctivitis. Prolonged contact with Roundup herbicide may cause dermal irritation. Ingestion of Roundup herbicide has been reported to produce gastrointestinal discomfort, nausea, vomiting and diarrhea.

Toxicological Data

Data from Monsanto studies indicate the following:

Oral LD_{50} (Rat):	5,400 mg/kg, Practically Nontoxic
Dermal LD_{50} (Rabbit):	>5,000 mg/kg, Practically Nontoxic
Eye Irritation (Rabbit, 24-hr):	(FHSA) Score = 4.1 on a scale of 110.0, Slightly Irritating
Skin Irritation (Rabbit, 24-hr):	(FHSA) Score = 4.3 on a scale of 8.0, Moderately Irritating
DOT Skin Irritation (Rabbit, 4-hr):	Not Corrosive
Inhalation LC_{50} (Rat, 4-hr):	3.18 mg/l (analytical concentration), Slightly Toxic

Patch testing of 50 human volunteers with Roundup herbicide at use concentration and 5X use concentration produced no positive reactions following initial application, any of 15 repeated applications in the induction phase, or on subsequent challenge 2 weeks later. Roundup herbicide is not considered a primary irritant or a sensitizing agent.

Patch testing of guinea pigs with Roundup herbicide produced essentially no irritation following initial application; mild to moderate erythema (redness), edema (swelling) and/or mild necrosis (tissue damage) were observed in some animals during subsequent repeated exposures in the induction phase. On challenge, no dermal response was observed in any of the animals. Roundup herbicide is not considered a dermal sensitizing agent in guinea pigs.

(Health Effects Summary Continued On Next Page)

HEALTH EFFECTS SUMMARY (Continued)

Single male and female dogs were orally administered Roundup herbicide or a 2 percent aqueous solution of Roundup herbicide at dosages ranging from 0.3125 to 5.0 ml/kg. No mortality and no inhibition of plasma acetylcholinesterase activity were reported. The most common effects observed were vomiting and diarrhea, which occurred shortly after dosing.

A series of 21-day dermal toxicity studies have been conducted in which Roundup herbicide was applied to the skin of male rabbits 6 hours per day, 5 days per week at various concentrations. At 5 times the intended use concentration, severe dermal irritation and systemic toxicity (mortality, reduced food consumption, body weight loss, and testicular effects) were observed. Rabbits treated with 3 times the intended use concentration and below, or only with the active ingredient glyphosate, exhibited only slight to moderate local irritation and had no signs of systemic effects. When the surfactant in Roundup formulation was tested, marked irritation and systemic effects were observed which were similar to those seen with the higher concentration of Roundup. Effects observed in these studies are considered to be a secondary response to the stress of severe dermal irritation, to which rabbits are particularly sensitive, rather than the result of direct systemic toxicity.

Rats were exposed by inhalation to aerosol concentrations of 0.05, 0.16 and 0.36 mg of a 33.3% Roundup solution per liter air 6 hours/day, 5 days/week for a total of 22 exposures over a 4 week period. Minor nasal irritation was observed in female animals. No adverse hematologic, biochemical or systemic histopathologic effects were noted. The systemic no-effect level was considered to be 0.36 mg of a 33.3% Roundup solution per liter of air.

Following a 24-hr topical application of Roundup herbicide to the abdomen of rhesus monkeys, approximately 1.8 percent of the administered dose of the active ingredient (glyphosate) was systemically absorbed. Excretion in the urine was the major route of elimination following systemic absorption.

Components

Data from Monsanto studies and from the scientific literature on the components of Roundup herbicide is discussed below:

Isopropylamine Salt of Glyphosate (MON 0139)

The isopropylamine salt of glyphosate (MON 0139) has been tested in acute and subchronic toxicity studies. For additional toxicity information on this material, please refer to the MON 0139 Material Safety Data Sheet.

Surfactant

The surfactant properties of this material are considered to contribute to the eye and skin irritation potential of Roundup herbicide.

PHYSICAL DATA

Appearance:	Clear, viscous amber-colored solution.
Odor:	Practically odorless to slight amine-like odor.
pH:	4.4 - 4.9
Specific Gravity (Water = 1):	1.17

SPILL, LEAK & DISPOSAL INFORMATION

Spill/Leak:

Observe all protective and safety precautions including use of rubber boots or rubber overshoes when cleaning up spills — See Occupational Control Procedures.

Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays (kitty litter, etc.) Collect contaminated absorbent, place in plastic lined metal drum and dispose of in accordance with instructions provided under DISPOSAL. Thoroughly scrub floor or other impervious surfaces with a strong industrial type detergent solution and rinse with water.

Liquid spills that soak into the ground should be dug-up, placed in plastic lined metal drums and disposed of in accordance with instructions provided under DISPOSAL.

Leaking containers should be separated from non-leakers and either the container or its contents transferred to a plastic lined drum or other non-leaking container and disposed of in accordance with instructions provided under DISPOSAL. Any recovered spilled liquid should be similarly collected and disposed of.

Do not contaminate water, foodstuffs, seed or feed by storage and disposal.

Disposal:

Materials resulting from the use of this product should be used according to label instructions if possible. Wastes that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or buried on site in a safe place so that it will not contaminate water supplies. All disposal should be in accordance with applicable Federal, State or local procedures.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. DO NOT CUT OR WELD ON OR NEAR THIS CONTAINER.

Metal Drums and Cans: Triple rinse container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Plastic Containers: Do not reuse container. Triple rinse container then puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Plastic may be burned or incinerated if permissible under state and local rules. If burned, stay out of smoke.

Bulk: Triple rinse emptied bulk containers. Then offer for recycling or reconditioning or disposal in a manner approved by state and local authorities.

ADDITIONAL COMMENTS

Environmental Toxicity Information:

Oral LD_{50} Goat:	4,860 mg/kg, Slightly Toxic
48-hr LD_{50} Honeybee:	>100 μg/bee, Practically Nontoxic
48-hr EC_{50} *Daphnia magna* (With Aeration):	37 mg/l, Slightly Toxic
48-hr EC_{50} *Daphnia magna* (Without Aeration):	24 mg/l, Slightly Toxic
48-hr EC_{50} *Gammarus pseudolimnaeus:*	42 mg/l, Slightly Toxic
96-hr TL_{50} Carp:	19.7 ppm, Slightly Toxic
96-hr LC_{50} Bluegill sunfish (Static):	14 mg/l, Slightly Toxic

(Additional Comments Continued On Next Page)

ADDITIONAL COMMENTS (Continued)

96-hr LC_{50} Bluegill sunfish (Flow-Through):	5.8 mg/l, Moderately Toxic
96-hr LC_{50} Rainbow trout (Static):	22 mg/l, Slightly Toxic
96-hr LC_{50} Rainbow trout (Flow-Through):	8.2 mg/l, Moderately Toxic
96-hr LC_{50} Channel catfish:	16 mg/l, Slightly Toxic
96-hr LC_{50} Fathead Minnow:	9.4 mg/l, Moderately Toxic
96-hr LC_{50} Crayfish:	>1,000 ppm, Practically Nontoxic

Carp contained in a static pond were unaffected at any time during a 90-day observation period following exposure by aerial application of Roundup herbicide at the normal use concentration. Tissue residue analyses indicated that glyphosate, the active ingredient in Roundup herbicide, will not bioaccumulate.

Immersion of chicken eggs at four different embryo ages (0, 6, 12 and 18 days) for about five seconds in 1 or 5% vol/vol Roundup in water solutions was reported to have no adverse effects on the hatchability or time to hatch of the eggs.

DATE: November, 1985 **SUPERSEDES:** March, 1982

MSDS NO.: M00007588

FOR ADDITIONAL NON-EMERGENCY INFORMATION, CALL: 314-694-4000

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Monsanto Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Monsanto Company be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

AR200793

ROUNDUP® is a registered trademark of Monsanto Company.

Hazards to humans and domestic animals.
CAUTION: Harmful if swallowed. Avoid contamination of feed and food stuffs. Environmental hazards:- Keep out of lakes, streams or ponds.

DISPOSAL: Do not reuse empty container. Rinse clean with water and dispose of in trash collection.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Always use freshly mixed solution.
Use soft water whenever possible.
Do not use on new transplants, newly rooted cuttings or when plants stressed by drought.
For most insects mix one part concentrate with 40 parts water or 3 fl. oz. (6 tablespoons) per gallon. Be sure that spray penetrates dense foliage and covers all infested surfaces thoroughly.

VEGETABLES — Mix 6 tablespoons per gal. of water. Apply when insects first appear or when damage occurs. Spray to wet all infested plant surfaces. One gal. of spray covers approximately 250 sq. ft. of growing area (150 to 200 gal. per acre.) For aphids spray again after 2 days or when insects return. For spider mites and whitefly be sure to spray underside of leaves; repeat at weekly interval or as necessary.
Beans, Peas to control aphids, leafhoppers, grasshoppers and spider mites. Use up to day of harvest.
Cole crops (Cabbage, Broccoli, Brussel Sprouts etc.) to control aphids, leafhoppers, and harlequin bug. Use up to day of harvest.
Cucurbits (Cucumber, Squash, Pumpkin, Melons) to control aphids, leafhoppers, spider mites, squash bug and whitefly. Use up to day of harvest.
Tomatoes, Peppers, Egg Plant to control aphids, spider mites, whitefly. Use up to day of harvest.

0 67894 00003 00798

Mfg for Safer Agro-Chem Inc.,
13910 Lyons Valley Rd., Jamul, Ca.

EPA Reg. No. 42697-1.

EPA Est. No. 42697-CA-01

SAFER AGRO-CHEM'S INSECTICIDAL SOAP

CONCENTRATE

CONTROLS

Adelgids	Lace Bugs	Scales
Aphids	Leaf Hoppers	Spittlebugs
Cricket	Mealybugs	Springtails
Earwigs	Mites	Tent Caterpillars
Fruitfly adults	Plant Bugs	Thrips
Fungus Gnats	Psyllids	Whitefly
Grasshoppers	Sawflies	Woolly Aphids

ON FOLIAGE PLANTS, FLOWERS, SHRUBS, TREES, VEGETABLES, FRUITS AND NUTS IN AND AROUND HOMES GREENHOUSES AND NURSERIES

ACTIVE INGREDIENTS	BY WEIGHT
Potassium salts of fatty acids	50.5%
INERT INGREDIENTS	49.5%
TOTAL	100.0%

Keep Out of Reach of Children
CAUTION

See side panel for additional cautions

NET CONTENTS 32 FL. OZS. U.S.

FOR ORDERS-CALL TOLL FREE
E. C. GEIGER
RTE. 13 P.O. BOX 239
HARLEYSVILLE, PA. 19438

FRUIT AND NUT TREES — Mix 6 tablespoons per gal. Spray when insects first appear or to prevent damage. Apply to achieve thorough coverage of branches and foliage. Repeat at weekly intervals or as needed. Avoid spraying when blossoms present. Use up to day of harvest.

Apples, Pears to control aphids, woolly aphids, scale crawlers, mites, pear psylla and pear slug.
Citrus (Lemons, Oranges, Grapefruit) to control aphids, cottony cushion scale, red scale, citrus thrips and mites.
Almonds, Filberts, Walnuts to control aphids, scale crawlers and mites.
Apricots, Peaches, Nectarines to control aphids, mites, apricot mealybug.
Grapes to control aphids and leafhoppers.

INDOOR PLANTS — For aphids and mealybugs spray again after two days or when insects return. For mites spray once a week for 2 to 3 weeks. For Blossom thrips on African violets spray to contact thrips on the blooms; root mealybug and springtail infestations can be reduced using a soil drench of one teaspoon of concentrate in a quart of warm water once a month. Do not use on Crown of Thorns; test on other euphorbias prior to full-scale application. Increase dilution for use on delicate ferns.

FLOWERS AND BEDDING PLANTS — Including foliage plants, roses and succulents. Apply as recommended under vegetables. For earwig control use 2 tablespoons per gallon and spray directly on insects after disturbing their hiding place. Do not use on nasturtiums, sweetpeas or violets.

ORNAMENTAL TREES AND SHRUBS — Apply to control crawler stage of adelgids, psyllids and scales or when infestation warrants. Apply as recommended under tree fruits and repeat application as needed. For tent caterpillars use 4 fl. oz. (8 tablespoons) per gallon and spray directly on young larvae when congregated on outside of tent. Use one part concentrate to two parts water to prevent hatching of gypsy moth egg masses; do not use this concentration on anything other than egg masses. Do not use on foliage of horse chestnut, mountain ash or Japanese maple.

GREENHOUSES — For whitefly use 1½ fl. oz. (3 tablespoons) concentrate per gallon May be used on foliage plants, flowers, fruits and vegetables. Apply according to above recommendations according to crop type. Before spraying large planting apply to a few plants and observe for phytotoxicity for 10 days. Do not use on newly rooted cuttings.

SAFER AGRO-CHEM INC. nor the sellers accept liability resulting from misuse.

CARGILL SALT
LESLIE SALT CO.
A CARGILL COMPANY

PRODUCT SAFETY DATA SHEET

A. GENERAL INFORMATION

TRADE NAME (COMMON NAME OR SYNONYM)		C.A.S. NO.
Salt Cargill Super Soft Pellets		7647-14-5
CHEMICAL NAME Sodium Chloride	FORMULA NaCl	MOLECULAR WEIGHT 58.4428

ADDRESS	
Cargill Salt Division P.O. Box 5621 Minneapolis, MN 55440	Leslie Salt Co. P.O. Box 364 Newark, CA 94560

CONTACT	PHONE NUMBER	DATE ISSUED	DATE REVISED
National Technical Director	(612) 475-6581	8/1/85	Same

B. FIRST AID MEASURES

Skin: Wash with water. Eyes: Irrigate with plenty of water.	EMERGENCY PHONE NUMBER (612) 476-1127

C. HAZARDS INFORMATION HEALTH (Reference (a).)

INHALATION
Inhalation of product may cause mild irritation of nose and throat.

INGESTION
Ingestion of large amounts (greater than 0.1 pound) may cause gastro-intestinal upset.

SKIN
Dust may cause mild irritation.

EYES
Dust may cause irritation.

AR200799

PERMISSIBLE CONCENTRATION

AIR	BIOLOGICAL
None established.	No TLV established.

UNUSUAL CHRONIC TOXICITY
None.

C. HAZARDS (Cont.) FIRE AND EXPLOSION

FLASH POINT °C	AUTOIGNITION TEMPERATURE °C	FLAMMABLE LIMITS IN AIR (% BY VOLUME)
Not flammable. ☐ OPEN CUP ☐ CLOSED CUP	NA	NA

D. PRECAUTIONS/PROCEDURES

FIRE EXTINGUISHING AGENTS RECOMMENDED NA
FIRE EXTINGUISHING AGENTS TO AVOID NA
SPECIAL FIRE FIGHTING PRECAUTIONS NA
VENTILATION Local exhaust if dusty conditions prevail.
NORMAL HANDLING Avoid eye contact or prolonged skin contact.
STORAGE Wet or damp conditions can cause caking and corrosion of metal contact surfaces.
SPILL OR LEAK Shovel up dry material into an empty container. Flush residue with water down local sewer.
SPECIAL: PRECAUTIONS/PROCEDURES/LABEL INSTRUCTIONS Store in cool, dry area. No special cautions or labeling are required.

E. PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION When required, use a respirator approved by NIOSH for product dusts.
EYES AND FACE In extremely dusty areas, chemical safety goggles should be used.
HANDS, ARMS, AND BODY Wear long-sleeved shirts and trousers for routine product handling. Gloves are optional.
OTHER CLOTHING AND EQUIPMENT NA

AR200800

F. PHYSICAL DATA

MATERIAL IS (AT NORMAL CONDITIONS):	APPEARANCE AND ODOR
☐ LIQUID ☒ SOLID ☐ GAS ☐ _____	White crystalline solid. Slight saline odor.

BOILING POINT 1465°C MELTING POINT 800°C	SPECIFIC GRAVITY (H_2O = 1) 2.16	VAPOR DENSITY (AIR = 1) NA
SOLUBILITY IN WATER (% BY WEIGHT) 26.395 Max. at 60°F	pH (20% SOLUTION) 6.5 - 9.5	VAPOR PRESSURE (mm Hg at 20°C) 2.4mm at 746.9°C

G. REACTIVITY DATA

STABILITY	CONDITIONS TO AVOID
☒ STABLE ☐ UNSTABLE	Wet/damp conditions can cause caking and corrosion.

INCOMPATABILITY (MATERIALS TO AVOID)

None provided the product is dry.

HAZARDOUS DECOMPOSITION PRODUCTS

None.

HAZARDOUS POLYMERIZATION	CONDITIONS TO AVOID
☐ MAY OCCUR ☒ WILL NOT OCCUR	

H. HAZARDOUS INGREDIENTS (Mixtures Only)

MATERIAL OR COMPONENT /C.A.S. NO.	WEIGHT %	HAZARD DATA (SEE SECTION J)

AR200801

I. ENVIRONMENTAL

DEGRADABILITY/AQUATIC TOXICITY Product is inorganic and may persist in the environment.	
EPA HAZARDOUS SUBSTANCE? ☐ YES ☒ NO IF SO, REPORTABLE QUANTITY: _____ #	40 CFR 116-117
WASTE DISPOSAL METHODS (DISPOSER MUST COMPLY WITH FEDERAL, STATE AND LOCAL DISPOSAL OR DISCHARGE LAWS) Flush to sewer if permitted by applicable disposal regulations.	
RCRA STATUS OF UNUSED MATERIAL: Not a "hazardous waste".	40 CFR 261

J. REFERENCES

PERMISSIBLE CONCENTRATION REFERENCES		
REGULATORY STANDARDS	D.O.T. CLASSIFICATION: NA	49 CFR
FDA regulations apply to food use and USP/NF grades (21 CFR). USDA regulations apply to use in meat and poultry products.		
GENERAL (a) Recommendations of the Salt Institute.		

K. ADDITIONAL INFORMATION

This product is not for food or drug use unless material is labeled "food grade," "USP grade," or "NF grade," as applicable.

This product safety data sheet is offered solely for your information, consideration and investigation.

Cargill Salt Division/Leslie Salt Co. provides no warranties, either express or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein.

AR200802

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

PPE B
UN 1790

SECTION I

MANUFACTURER'S NAME: SEHL INTERNATIONAL, INC.	EMERGENCY TELEPHONE NO.: 415-341-3799
ADDRESS (Number, Street, City, State, and ZIP Code): P.O. Box 8055, Foster City, CA 94404	
CHEMICAL NAME AND SYNONYMS:	TRADE NAME AND SYNONYMS: SEHL SAFE
CHEMICAL FAMILY: buffered/inhibited acid cleaner	FORMULA:

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Hydrogen Fluoride	4.2	

RECEIVED
OCT 17 1986
C. MURAWCZYK

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	212	SPECIFIC GRAVITY (H_2O=1)	1.043
VAPOR PRESSURE (mm Hg.)	NIL	PERCENT, VOLATILE BY VOLUME (%)	99%
VAPOR DENSITY (AIR=1)	1.03	EVAPORATION RATE (_____=1)	SAME AS WATER
SOLUBILITY IN WATER	100%		

APPEARANCE AND ODOR: Clear (coloring dyes added) Extremely light color

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): NONE	FLAMMABLE LIMITS: NONE	Lel	Uel
EXTINGUISHING MEDIA: NONE REQUIRED			
SPECIAL FIRE FIGHTING PROCEDURES: NONE REQUIRED			
UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE			

AR200803

(Continued on reverse side)

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: 32 ppm

EFFECTS OF OVEREXPOSURE: May cause minor irritation on skin. Immediately wash skin with soapy water and clean under finger nails.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush thoroughly with large quantities of cold water.

SKIN: Wash skin with soap & water & rinse thoroughly.

INTERNAL: Drink large quantities of water, follow with egg whites or mineral oil. Do not induce vomiting. Call physician immediately

SECTION VI - REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	X	Do not expose to oxidation agents.

INCOMPATABILITY (Materials to avoid): Will attack aluminum and aluminum alloys if allowed contact for long period of time.

HAZARDOUS DECOMPOSITION PRODUCTS: No

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	NONE

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Rinse or flood area thoroughly with water. E.P.A. WASTE # D002

WASTE DISPOSAL METHOD

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type): None required, but recommended in confined, non-ventilated areas.

VENTILATION			
	LOCAL EXHAUST: Normal ventilation sufficient	SPECIAL: NONE	
	MECHANICAL (General): Enclosed area may require fan	OTHER: NONE	

PROTECTIVE GLOVES: Plastic gloves are suggested

EYE PROTECTION: Splash-proof goggles recommended.

OTHER PROTECTIVE EQUIPMENT: NONE

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: NONE

D.O.T. Spill Cat. - unlisted U.N. # 1790

OTHER PRECAUTIONS: POISON IF SWALLOWED.

AR200804

Keep away from children. For industrial use only.

12/02/85

MATERIAL SAFETY DATA SHEET

UNION CARBIDE AGRICULTURAL PRODUCTS COMPANY, INC.
P.O. Box 12014, T.W. Alexander Drive, Research Triangle Park, NC 27709
24-HOUR EMERGENCY TELEPHONE 1-800-UCC-HELP

Effective Date : 5/20/86 Date Printed: MAY 22, 1986
PRODUCT CODES: P80443 , P21479 , P21457
EPA Registration Number: 264-314

PRODUCT NAME: "SEVIN" BRAND 50W CARBARYL INSECTICIDE

I. IDENTIFICATION

CHEMICAL NAME: 1-Naphthyl N-methylcarbamate

FORMULA: C12H11NO2 MOLECULAR WEIGHT:201.20

SYNONYMS: Carbaryl

CAS # & NAME:
63-25-2 1-Naphthalenol methylcarbamate

IMPORTANT HEALTH EFFECT INFORMATION

WARNING!

MAY BE FATAL IF SWALLOWED.
HARMFUL IF INHALED OR ABSORBED THROUGH THE SKIN.

See Section IV for complete Health Hazard Data.

II. HAZARDOUS INGREDIENTS

MATERIAL	WEIGHT %
(1) Carbaryl, (1-Naphthyl N-methylcarbamate)	50
(2) Other ingredients (Trade Secret)	

ALLOWABLE EXPOSURE LIMITS:
Carbaryl: 5mg/cubic meter of air TLV-TWA (ACGIH) and PEL-TWA (OSHA)
Carrier: Use OSHA PEL and ACGIH TLV for nuisance dust containing less than 1% quartz.

III. PHYSICAL DATA

SPECIFIC GRAVITY / BULK DENSITY: 20 lbs/cubic foot
BOILING POINT, 760 mm Hg, Degrees C (F): Not applicable

(Continued on Page 2)

III. PHYSICAL DATA (continued)

MELTING POINT, Degrees C (F): Not known
FREEZING POINT, Degrees C (F): Not applicable
VAPOR PRESSURE, . Degrees C: Not applicable
VAPOR DENSITY (air=1): Not applicable
pH: Not known
SOLUBILITY IN WATER,%/wt @30 Degrees C: Dispersible
APPEARANCE AND ODOR: White to light tan powder; mild phenolic odor

IV. HEALTH HAZARD DATA

GENERAL INFORMATION

Illness may occur rapidly after overexposure to this product. The principal hazard of this product is reversible cholinesterase inhibition. Symptoms are dose dependent, rapid in onset and reversible in time. The main symptoms are listed below.

TOXICOLOGY DATA:

Oral LD50 (rats) - 406 mg/kg body weight
Dermal LD50 (rabbits) - No information available
Inhalation LC50 (rats - 4 Hour Exposure) - 3.21 mg/L
Skin Effects: No information available
Eye Effects : No information available

EFFECTS OF SINGLE OVEREXPOSURE:

Swallowing:

May be fatal if swallowed. (See TOXICOLOGY DATA)
May lead to rapid onset of nausea, vomiting, abdominal pain, diarrhea, pinpoint pupils, blurred vision, profuse sweating, salivation, tremor, muscle twitching, and temporary paralysis. In severe poisoning respiratory depression and convulsions may occur.

Skin Absorption:

Harmful if absorbed through skin.
No specific toxicology data is available on this product, but studies on the technical product would indicate that skin absorption may lead to symptoms as described above.

(Continued on Page 3)

IV. HEALTH HAZARD DATA (continued)

Inhalation:
Harmful if inhaled.
Inhalation of dusts or sprays (mists) may lead to symptoms as described above.
May be irritating to the respiratory tract.

Skin Irritation:
No significant adverse effects are anticipated based on available information.

Eye Contact:
Causes eye irritation, seen as tearing and redness.
No specific toxicology data is available on this product, but studies on the technical product would indicate that dusts or sprays (mists) may cause eye irritation, seen as tearing and redness.

EFFECTS OF REPEATED OVEREXPOSURE:
This product causes reversible cholinesterase inhibition.
Repeated overexposure may cause more severe cholinesterase inhibition with the signs and symptoms described for single overexposures being more pronounced.

OTHER EFFECTS OF OVEREXPOSURE:
See Notes To Physician.

EXISTING MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Overexposure may aggravate existing chronic cardiovascular or respiratory disease leading to respiratory difficulty, pulmonary edema and cyanosis.

EMERGENCY AND FIRST AID PROCEDURES:

CAUTION: Persons attending the victim should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair.

Remove the patient from immediate source of exposure and assure that the individual is breathing. Use artificial respiration if necessary, to assure continued breathing. GET MEDICAL ATTENTION.

(Continued on Page 4)

IV. HEALTH HAZARD DATA (continued)

Swallowing:
If patient is conscious and alert, give 2-3 glasses of water or milk to drink. If available, give one tablespoon of Syrup of Ipecac to induce vomiting. Alternatively, induce vomiting by touching back of throat with finger. Do not repeat the Syrup of Ipecac. Do not make an unconscious person vomit. GET MEDICAL ATTENTION.

Skin:
Immediately wash skin with plenty of soap and water, if available, while removing contaminated clothing and shoes. Wash clothing separately before reuse.

Inhalation:
Remove victim to fresh air. If not breathing, give artificial respiration. Administer oxygen if necessary. GET MEDICAL ATTENTION.

Eyes:
Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. GET MEDICAL ATTENTION.

NOTES TO PHYSICIAN:
All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.
This product contains a methyl carbamate insecticide, which is a cholinesterase inhibitor. Overexposure to this substance may cause toxic signs and symptoms due to stimulation of the cholinergic nervous system. These effects of overexposure are spontaneously and rapidly reversible.
Specific treatment consists of parenteral atropine sulfate. Caution should be maintained to prevent overatropinization. Mild cases may be given 1 to 2 mg. intramuscularly every 10 minutes until full atropinization has been achieved and repeated thereafter whenever symptoms reappear. Severe cases should be given 2 to 4 mg. intravenously every 10 minute until fully atropinized, then intramuscularly every 30 to 60 minutes as needed to maintain the effect for at least 12 hours. Dosages for children should be appropriately reduced. Complete recovery from overexposure is to be expected within 24 hours.
Narcotics and other sedatives should not be used. Further, drugs like 2-PAM (pyridine-2-aldoxime methiodide) are NOT recommended.
To aid in confirmation of a diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen. Analyses will be arranged by Union Carbide Agricultural Products Company, Inc.
Carbaryl, when administered by various routes, at doses toxic to the

AR230808

(Continued on Page 5)

IV. HEALTH HAZARD DATA (continued)

maternal animals, has been shown to produce developmental toxicity in a number of species. Carbaryl produces no teratogenic effect in the absence of maternal toxicity. In addition, the balance of the evidence supports the conclusion that the active ingredient and its possible metabolites do not represent a quantifiable mutagenic risk to humans. Carcinogenicity studies in animals have been shown to be negative.

V. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT Degrees C (F): 193 (380)(carbaryl) Cleveland Open Cup

EXPLOSIVE LIMITS IN AIR (ounces/cubic foot):
Lower: 0.02 (carbaryl)
Upper: Not known

AUTOIGNITION TEMPERATURE Degrees C (F): 625 (1157)(carbaryl)

EXTINGUISHING MEDIA: Use carbon dioxide or dry chemical for small fires. Use water spray or foam (alcohol, polymer, or ordinary) for large fires.

SPECIAL FIRE FIGHTING PROCEDURES: Provide for the protection of employees and residents:

a) Evacuate residents who are downwind of fire.
b) Prevent unauthorized entry to fire area.
c) Persons who may have been exposed to contaminated smoke should be examined by a physician and treated appropriately.
d) Dike area to prevent runoff and contamination of water sources.

Notify local authorities that firemen should:

a) Wear protective clothing and use self-contained breathing apparatus.
b) Be immediately relieved from duty, if exposed to contaminated smoke, and checked for symptoms of poisoning. These should not be mistaken for heat exhaustion or smoke inhalation. See Section IV, Health Hazard Data for symptoms of poisoning, first aid procedures, and notes to physician.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Thermal decomposition products may be hazardous. These may include oxides of nitrogen, carbon and sulfur, and minute quantities of methyl isocyanate.
Avoid dispersion of dust in air to reduce potential explosion hazard.

AR200809

(Continued on Page 6)

V. FIRE AND EXPLOSION HAZARD DATA (continued)

Use electrical equipment suitable for atmospheres that may contain combustible dusts.

VI. REACTIVITY DATA

STABILITY:
Stable

CONDITIONS TO AVOID:
Extended storage at temperatures in excess of 100 Degrees F.

MATERIALS TO AVOID:
Alkalis, strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS:
Oxides of nitrogen, carbon and sulfur, and minute quantities of methyl isocyanate may be produced upon thermal decomposition at high temperatures.

HAZARDOUS POLYMERIZATION:
Will not occur.

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Sweep or shovel spills into waste container while minimizing dust generation. Wear appropriate personal protective equipment. Do not contaminate water sourc

WASTE DISPOSAL METHOD: Dispose of in an approved landfill or incinerator following all applicable federal, state, and local regulations.

VIII. SPECIAL PROTECTION INFORMATION

PROTECTIVE EQUIPMENT SHOULD BE USED IN THE MANUFACTURE OR FORMULATION OF TH PRODUCT, INCLUDING THE FOLLOWING:

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirator for pesticide du when handling spills or leaks, or when airborne concentrations exceed allowable exposure limits.

AR200810

(Continued on Page 7)

MATERIAL SAFETY DATA SHEET

UNION CARBIDE AGRICULTURAL PRODUCTS COMPANY, INC.
P.O. Box 12014, T.W. Alexander Drive, Research Triangle Park, NC 27709
24-HOUR EMERGENCY TELEPHONE 1-800-UCC-HELP

PRODUCT NAME: "SEVIN" BRAND 50W CARBARYL INSECTICIDE

VIII. SPECIAL PROTECTION INFORMATION (continued)

VENTILATION: Mechanical (general) ventilation.

PROTECTIVE GLOVES: Impervious gloves, e.g. PVC or butyl.

EYE PROTECTION: Goggles, eye bath.

OTHER PROTECTIVE EQUIPMENT: Full-body protective clothing, safety shower.

IX. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Store unused product in original container only, in cool, dry area out of reach of children and animals. Do not store in areas where temperatures frequently exceed 100 Degrees F. Do not contaminate water, food or feed by storage or disposal.

The opinions expressed herein are those of qualified experts within Union Carbide Agricultural Products Company, Inc. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Because the use of this information and these opinions and the conditions of use of the Product are not within the control of Union Carbide Agricultural Products Company, Inc., it is the user's obligation to determine the conditions of safe use of the product.

"SEVIN" is a registered trademark of Union Carbide.

Copyright 1986 Union Carbide Agricultural Products Company, Inc. AR200811

(Last Page)

Zimmerman, Ave.

NOTICE: JUDGEMENT BASED ON INDIRECT TEST DATA.

AEROSOL MATERIAL SAFETY DATA SHEET

(ESSENTIALLY SIMILAR TO FORM OSHA-20)

Chemi-cap

EMERGENCY PHONE (305) 974-5440

SILAZENE

UN 1950

CHEMICAL PACKAGING CORPORATION
P.O. BOX 9947, FT. LAUDERDALE, FL 33310

E95 [redacted] Silicone SPRAY7499
QUICK PRODUCT IDENTIFIER (IN PLANT COMMON NAME)

I — IDENTIFICATION

SIGNATURE OF PERSON RESPONSIBLE FOR PREPARATION	W. Smith	DATE PREPARED	11-25-85
PACKAGE TYPE	Aerosol Container		
FORMULA	Proprietary Mixture	TRADE NAME	Silicone

II — HAZARDOUS INGREDIENTS

PRINCIPLE HAZARDOUS COMPONENT(s) (CHEMICAL NAME(S))	CAS#	APPROX. %(wt)	TLV (ppm)
1,1,1-Trichloroethane	71-55-6		350
Poly (dimethyl) siloxane	63148-62-9		—
Isopropyl alcohol	67-63-0		400
THIS PRODUCT CONTAINS NO KNOWN OR SUSPECTED CARCINOGENS.			
The ingredients above are listed in descending order of concentration.			
PROPELLANT propane/butane	74-98-6/75-28-5		1000

III — PHYSICAL DATA

BOILING POINT (°F) OF CONCENTRATE	N.D.	SPECIFIC GRAVITY (H_2O = 1) @ 75°F OF CONCENTRATE	1.297
VAPOR PRESSURE (psig) IN CAN @ 75°F	56	% VOLATILE BY VOLUME IN CAN	> 98
VAPOR DENSITY	N.D.	FLASH POINT OF CONCENTRATE	63° F Tag Open Cup
SOLUBILITY IN WATER OF CONCENTRATE	Negligible	APPEARANCE AND ODOR OF SPRAY	Clear water white liquid mild sweetish odor

IV — FIRE & EXPLOSION HAZARD DATA

FLAMMABILITY as per CPSC FLAME EXTENSION TEST	spray flammable	FLAMMABLE LIMITS	Lower N/A / Upper N/A

EXTINGUISHING MEDIA
foam dry chemical CO_2

SPECIAL FIRE FIGHTING PROCEDURES
KEEP CONTAINERS COOL. USE EQUIPMENT OR SHIELDING REQUIRED TO PROTECT PERSONNEL AGAINST BURSTING, RUPTURING OR VENTING CONTAINERS.

RECEIVED
APR 0 9 1987
C. MURAWCZYK

UNUSUAL FIRE & EXPLOSION HAZARDS
AT ELEVATED TEMPERATURES (ABOVE 120°F) CONTAINERS MAY VENT, RUPTURE OR BURST.

V — REACTIVITY DATA

CHEMICAL STABILITY	UNSTABLE		CONDITIONS TO AVOID: Do not expose to temp. above 120° F.
	STABLE	X	

INCOMPATABILITY (Materials to avoid) Strong alkalies, oxidizers, aluminum and other reactive metals.

HAZARDOUS DECOMPOSITION PRODUCTS
Abnormally high temp. Possible trace amounts of phosgene

AR200812

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID: None
	WILL NOT OCCUR	X	

AEROSOL PRODUCTS PRESENT A LIMITED HAZARD DURING STORAGE OR USE IF LABEL PRECAUTIONS ARE FOLLOWED. INTENTIONAL MIS-USE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS CAN BE HARMFUL, OR FATAL. PRESSURIZED CONTAINERS MUST NOT BE EXPOSED TO TEMPERATURES ABOVE 120°F AND SPRAY SHOULD NOT BE DIRECTED TOWARD FACE OR EYES, OPEN FLAME OR OTHER SOURCE OF IGNITION.

VI— HEALTH HAZARD DATA

OSHA PERMISSIBLE EXPOSURE LIMIT	THRESHOLD LIMIT VALUE
N.D.	See Section II

EFFECTS OF OVER EXPOSURE

INHALATION:

Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headaches and possible unconsciousness.

SKIN CONTACT/ABSORPTION:

Prolonged or repeated contact can cause moderate irritation, defatting and dermatitis.

INGESTION:

Can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis.

EYES:

Can cause severe irritation, redness, tearing and blurred vision.

EMERGENCY AND FIRST AID PROCEDURES

EYES AND SKIN Flush with water, lifting upper and lower lids. Get medical attention. Wash exposed area with soap and water.

INHALATION Remove to fresh air. If breathing difficult, administer oxygen. If breathing has stopped give artificial respiration. Get medical attention.

INGESTION Do not induce vomiting. Get medical attention. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis.

VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE CONTAINER IS PUNCTURED AND MATERIAL IS RELEASED.

Clean up area by mopping or with absorbent materials and place in closed containers for disposal. Consult Federal, State or Local disposal authorities for approved disposal procedures.

WASTE DISPOSAL METHOD

WHEN USED PROPERLY AEROSOL PRODUCTS DO NOT GENERATE HAZARDOUS WASTE. EMPTY DE-PRESSURIZED CONTAINERS CAN NOT BE REUSED AND SHOULD BE WRAPPED AND PUT IN TRASH COLLECTION. CANS WHICH ARE PRESSURIZED OR CONTAIN LIQUID MUST BE DISPOSED OF IN A PERMITTED WASTE MANAGEMENT FACILITY CONSULT FEDERAL, STATE AND LOCAL DISPOSAL AUTHORITIES FOR APPROVED PROCEDURES.

VII — SPECIAL PROTECTION INFORMATION

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY General ventilation adequate.

EYE Chemical splash goggles in compliance with OSHA regulations.

SKIN Wear resistant gloves such as: neoprene, nitrile rubber or polyvinyl chlcride.

OTHER Do not eat, drink or smoke in work area, wash hands before eating.

VENTILATION REQUIREMENTS Provide sufficient mechanical (general) and/or local exhaust ventilation to maintain exposure below TLV (S)

IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Do not store at temperatures above 120 F.

SPECIAL PRECAUTIONARY STATEMENTS

PLEASE READ AND FOLLOW THE DIRECTIONS ON THE PRODUCT LABEL. THEY ARE YOUR BEST GUIDE TO USING THIS PRODUCT IN THE MOST EFFECTIVE WAY, AND GIVE THE NECESSARY SAFETY PRECAUTUIONS TO PROTECT YOUR HEALTH.

AR200819

NOTICE: WE BELIEVE THAT THE INFORMATION CONTAINED ON THIS MATERIAL SAFETY DATA SHEET IS ACCURATE. THE SUGGESTED PROCEDURES ARE BASED ON EXPERIENCE AS OF THE DATE OF PUBLICATION. THEY ARE NOT NECESSARILY ALL-INCLUSIVE NOR FULLY ADEQUATE IN EVERY CIRCUMSTANCE. ALSO, THE SUGGESTIONS SHOULD NOT BE CONFUSED WITH NOR FOLLOWED IN VIOLATION OF APPLICABLE LAWS, REGULATIONS, RULES OR INSURANCE REQUIREMENTS.
NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE IS MADE.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME Electrical Quality Silicone (Aerosol) #2094	# MSDS002094
MANUFACTURED BY: CRC CHEMICALS	Phone (215) 674-4300
885 LOUIS DRIVE, WARMINSTER, PA. 18974	

1. INGREDIENTS

	CAS #	ACGIH TLV	OSHA PEL	Other Limits	%
Dimethyl polysiloxane	63148-62-9	NA	NA		3
1,1,1 Trichloroethane	71-55-6	350	350		51
Hexane	64742-89-8	NA	500	100	42
*Carbon dioxide	124-38-9	5000			4

*Carbon dioxide functions as propellent for this product. Pressure of aerosol is 85 psig at 70°F.

4 2 0

PPE B

UN 1950

2. PHYSICAL DATA (Propellent not included)

Specific Gravity 0.9268	Vapor Pressure NA	% Volatile 97
Boiling Point 152°F (Initial)	Evaporation Rate Rapid	
Freezing Point NA	Vapor Density Heavier than air	

Appearance and Odor Clear water white liquid - solvent odor

Solubility Not soluble in water

RECEIVED SEP 30 1988 C. MURAWCZYK

3. FIRE AND EXPLOSION DATA

Flashpoint <20°F Method TCC	Flammable Limits NA	
Extinguishing Media Foam, Carbon dioxide, Dry chemicals	LEL	UEL

Unusual Hazards Aerosol cans may explode when heated above 130°F.

4. REACTIVITY AND STABILITY

Stability Stable

Hazardous decomposition products Thermal (Carbon monoxide, hydrogen chloride, and possib phosgene

Materials to avoid Strong oxidizers.

5. PROTECTION INFORMATION

AR200814

Ventilation Required in a confined area to maintain vapor below TLV.

Respiratory Self contained breathing apparatus

Gloves Solvent resistant | Eye & Face Safety Goggles

Other Protective Equipment Not normally required for aerosol use

7. HEALTH HAZARD DATA

Primary Routes of Entry Inhalation and Skin

Signs and Symptoms of Exposure

1. Acute Overexposure Inhalation - Headache, dizziness, nausea, anesthesia & unconsciousness. Eyes - may be irritating to eyes. Skin - may be irritating to skin.

2. Chronic Overexposure - Prolonged high levels of the n-hexane may damage nerve tissue - high levels of 1,1,1 trichloroethane may affect liver and kidneys.

Medical Conditions Generally Aggravated by Exposure

Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Program	Yes ☐ No ☒	IARC Monographs	Yes ☐ No ☒	OSHA	Yes ☐ No ☒

Emergency and First Aid Procedures (If symptoms persist, call a physician)

1. Inhalation Remove to fresh air - apply artificial respiration if needed.
2. Eyes Flush with large amounts of water.
3. Skin Wash with soap and water - Remove contaminated clothing.
4. Ingestion Do not induce vomiting.

7. SPILL OR LEAK PROCEDURES

Precautions to be taken in Handling and Storage Store in a cool dry area.

Steps to be taken in case Materials is released or spilled Remove sources of ignition, ventilate area. Absorb liquid and put in a vapor tight container.

Waste Disposal Partially used and unused aerosols are hazardous waste if discarded. Dispose in conformance with Federal, State & local regulations.

8. SPECIAL PRECAUTIONS AND USE DIRECTIONS

Aerosols may explode if exposed to temperatures over 130°F.

AR200815

PREPARED BY: A.B. Reed

ORIGINAL DATE OR DATE OF REVISION Nov. 1985

(Other Industrial Industries)

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME: Aerosol Services Company, Inc.	EMERGENCY TELEPHONE NO.: (213) 968-8531
ADDRESS (Number, Street, City, State, and ZIP Code): 425 S. Ninth Ave. City of Industry, CA 91746	
CHEMICAL NAME AND SYNONYMS: N/A	TRADE NAME AND SYNONYMS: Smoke Detector Tester
CHEMICAL FAMILY: N/A	FORMULA: N/A

2 2 0

PPE A

UN 1993

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Petroleum Hydrocarbon	10	400ppm
Chlorinated Hydrocarbon	15	500ppm
Ester	5	5mg/cum
Hydrocarbon Aerosol Propellants	70	1000ppm

RECEIVED
AUG 4 1986
C. MURAWCZYK

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H_2O=1)	.98
VAPOR PRESSURE (~~mm Hg.~~) Can Pressure @70°F	50 psig	PERCENT, VOLATILE BY VOLUME (%)	100
VAPOR DENSITY (AIR=1)	>1	EVAPORATION RATE (_____ =1)	N/A
SOLUBILITY IN WATER	Insoluble		
APPEARANCE AND ODOR	Aerosol Air Spray		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): N/A Aerosol Can	FLAMMABLE LIMITS: Propellent	Lel: 1.8% vol.	Uel: 9.5% vol.
EXTINGUISHING MEDIA: CO_2, Dry Chemical, Foam			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS: Rupture of container above 130°F could cause boiling liquid flash fire if ignited.			

AR200816

(Continued on reverse side)

Form OSHA-20
Rev. May 72

SECTION V — HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: See Section II

EFFECTS OF OVEREXPOSURE: Irritiation, dizziness, Headache, unconsciousness, asphyxiation. Excess liquid contact with skin will dry and defat the skin.

EMERGENCY AND FIRST AID PROCEDURES: Vapor: Remove from contact, call a physician. If breathing is irregular or stopped, start resusitation, administer oxygen. Swallowed: Give two glasses of water. Induce vomiting immediately by sticking finger down throat. Call a physician. Never give an unconscous person anthing by mouth. Skin: Wash with warm soap and water, remove contaminated clothing. Eyes: Flush with clear water for 15 minutes or until irritation subsides

SECTION VI · REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	X	

INCOMPATABILITY *(Materials to avoid)*: Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	

SECTION VII · SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Leaking cans should be placed in open pail outdoors until pressure has dissipated, then dispose of.

WASTE DISPOSAL METHOD: Bury at approved landfill in accordance with Local, State, and Federal Law.

SECTION VIII · SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*: None

VENTILATION		
	LOCAL EXHAUST: Sufficient to keep solvent vapor below TLV	SPECIAL: None
	MECHANICAL *(General)*	OTHER: None

PROTECTIVE GLOVES	EYE PROTECTION
None	None

OTHER PROTECTIVE EQUIPMENT: None

SECTION IX · SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep from sources of ignition. Do not take internally. Avoid excessive inhalation of aerosol.

OTHER PRECAUTIONS: Do not store above 120°F. Do not incinerate or puncture container.

AR200817

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

PPE B
UN 1142

SECTION I

MANUFACTURER'S NAME: RITE-OFF, INC.	EMERGENCY TELEPHONE NO.: (516) 665-6868
ADDRESS (Number, Street, City, State, and ZIP Code): 1545 Fifth Industrial Ct. Bay Shore, NY 11706	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS: Stainless Steel Gr
CHEMICAL FAMILY	FORMULA: 802

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS 1,1,1, Trichlorethane	68		FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)

RECEIVED

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H_2O=1)	C. MURAWCZYK
VAPOR PRESSURE (mm Hg.)		PERCENT, VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER	none		
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	none	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA	CO_2			
SPECIAL FIRE FIGHTING PROCEDURES	Standard method used by fire dept.			
UNUSUAL FIRE AND EXPLOSION HAZARDS	None that we know of			

AR200818

(Continued on reverse side)

Form OSHA-20
Rev. May 72

ORIGINAL (Red)

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECTS OF OVEREXPOSURE Slight Drowsiness

EMERGENCY AND FIRST AID PROCEDURES Over inhalation-get fresh air immediately Eye contact-flush off with water. If irritation persists see physician.

SECTION VI - REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	X	

INCOMPATABILITY *(Materials to avoid)* Do not mix with foreign chemicals

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	As far as we know.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
1- Flush off with water mixed with detergents based with cleaning compound. 2- If released in air, generate ventillation

WASTE DISPOSAL METHOD Check with local sewer dept.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*

VENTILATION	LOCAL EXHAUST	SPECIAL
	X	
	MECHANICAL *(General)*	OTHER

PROTECTIVE GLOVES	EYE PROTECTION
rubber gloves if available	

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Keep away from open flame.

OTHER PRECAUTIONS

GPO 930-340

Form OSHA-20
Rev. May 72

Rec Tites

ORIGINAL (Red)

STARTEX QUALITY PRODUCTS

MATERIAL SAFETY DATA SHEET

STARTEX CHEMICAL, INC.
P.O. Box 1797
Bellaire, Texas 77401
(409) 539-6244

Name: STORAGETEK HUB & TRANSPORT CLEANER FLUID

CHEMICAL FAMILY: Halogenated Hydrocarbon, Alcohol and Stabilizer.

SYNONYMS: Trichlorotrifluoroethane + Isopropanol Mixtures + Stabilizer.

FORMULA: $CCl_2FCClCF_2 + CH_3CHOHCH_3 + CH_3NO_2$

CAS NAME: Ethane, 1,1,2-Trichloro-1,2,2,-Trifluoro, Isopropyl Alcohol, Methane, Nitro

CAS REGISTRY: 76-13-1 67-63-0 75-52-5

MANUFACTURER/DISTRIBUTOR: E. I. duPont de Nemours & Co. (Inc.)

MEDICAL EMERGENCY PHONE: (800) 441-3637

ADDRESS: Freon[R] Products Division, Wilmington, DE. 19898

TRANSPORTATION EMERGENCY PHONE: CHEMTREC (800) 424-9300

PHYSICAL DATA

Boiling Point (F°)	120.0
Density: (g/cc @77%F)	1.115
Vapor Density (Air=1)	4.9
Vapor Pressure mm Hg @77°F	151
Solubility in H_2O	(1)
Evaporation Rate (CCl_4=1)	Not Determined
pH Information: Neutral	
Percent Volatile by Volume:	100
Form: Liquid	
Appearance: Clear	
Color: Colorless	
Odor: Slight Solvent Odor	

(1) Alcohol portion is miscible with water. See special fire fighting instructions.

HAZARDOUS COMPONENTS

Trichlorotrifluoroethane	64.7%
Isopropyl Alcohol	35.0%
Nitromethane	0.3%

AR200820

ORIGINAL
(Red)

HAZARDOUS REACTIVITY

Stability: Materials are stable. However, avoid open flames and high temperatures.
Incompatibility: Alkali or alkaline earth metals - powdered Al, Zn, Be, etc.
Decomposition: The components of these blends can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrochloric and hydrofluoric acids and possible carbonyl halides.
Polymerization: Will not occur.

FIRE AND EXPLOSION DATA

Flash Point: None to boil. Reduces to 90° after 45% evaporation.
Method: TOC
Autoignition Temperature: Trichlorotrifluoroethane not determined, Isopropanol 860°F.
Flammable Limits in Air, % by volume:
Lower: Nonflammable Upper: Nonflammable
Autodecomposition Temperature: Not determined.
Fire and Explosion: Drums may rupture under fire conditions. Decomposition may occur.
Extinguishing Media: Nonflammable.
Special Fighting Instructions: Addition of excess water will extract isopropyl alcohol and may form a flammable, supernatant layer. Self-contained breathing apparatus may be required if drums rupture and contents are spilled under fire conditions.

HEALTH HAZARD INFORMATION

Principal Health Hazards:
Inhalation: Vapor is heavier than air and may cause suffocation by reducing oxygen available for breathing. Breathing high concentrations of these products can cause light headedness, giddiness, shortness of breath, irritation of the upper respiratory passages, and may lead to narcosis, cardiac irregularities, unconsciousness or death. Trichlorotrifluoroethane LD 50 Rat 52,000 ppm/4hrs., Isopropanol LD 50 Rat 16,000 ppm/4hrs.
Skin: Not a corrosive or irritant after single contact; however, repeated liquid contact can cause defatting of the skin resulting in irritation. This material is poorly absorbed throught the skin.
Eye: Isopropanol is an eye irritant.
Oral: Although oral toxicity is low (Trichlorotrifluoroethane-LD 50 Rats 43,000 mg/kg, Isopropyl Alcohol-LD 50 Rats 5.840 mg/kg, Nitromethane-LD 50 Rats 1,210 mg/kg), ingestion is to be avoided.

Exposure Limits:

PEL (OSHA) :	Trichlorotrifluoroethane	1000 ppm
	Isopropanol	400 ppm
	Nitromethane	100 ppm
TLV (ACGIH) :	Trichlorotrifluoroethane	1000 ppm
	Isopropanol	400 ppm
	Nitromethane	100 ppm
	Hub & Trans. Cleaner Fluid	500 ppm

AR200821

Safety Precautions: Avoid breathing vapors and prolonged skin exposures. Use only in well ventilated areas.

ORIGINAL (Red)

First Aid:
Inhalation: Remove to fresh air, call a physician. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Do not give epinephrine or similar drugs.

Note to Physicians: Because of possible increased risk of eliciting cardiac dysrythmias, catecholamine drugs, such as epinephrine, should be considered only as a resort in life-threatening emergencies.

Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
Skin: Flush with water. Get medical attention if irritation is present.
Oral: No specific intervention is indicated as the material is not likely to be hazardous by ingestion. Do not induce vomiting as the hazard of aspirating the material into the lungs is a greater hazard than allowing it to progress through the intestinal tract.

Medical Conditions Possibly Aggravated by Exposure:
Cardiovascular Disease: See Principal Health Hazards: Inhalation Section.

Other Health Hazards:
The components are not listed as carcinogens by IARC, NTP, or OSHA. Based on animal studies and human experiences this mixture poses no hazard to man relative to systemic toxicity, carcinogenicity, mutagenicity, or teratogenicity when occupational exposures are below its recommended exposure limits.

PROTECTION INFORMATION

Generally Applicable Control Measures: Normal ventilation for standard manufacturing procedures is generally adequate. Local exhaust should be used when large amounts are released. Mechanical ventilation should be used in low places.
Personal Protective Equipment: Butyl gloves should be used to avoid prolonged or repeated exposure. Chemical splash goggles should be available for use as needed to prevent eye contact. Under normal manufacturing conditions no respiratory protection is required when using this product. Self-contained breathing apparatus (SCBA) is required if a large spill occurs.

DISPOSAL INFORMATION

Spill, Leak or Release: Ventilate area. Do not flush into sewers. Dike spill. Collect with an absorbent material and transfer to steel drums for recovery or disposal. Comply with federal, state and local regulations on reporting release.
Waste Disposal: Comply with federal, state and local regulations. Remove to a permitted waste disposal facility. EPA Hazardous Waste Nos. F001 and F002 may apply to waste materials.

SHIPPING INFORMATION

Domestic-Other Than Air (DOT)
Proper Shipping Name: Not regulated.

International Water or Air (IMO/ICAO)
Proper Shipping Name: Not regulated.

Other Information:

Shipping Containers: Drum, Tank Trucks, Tank Cars.
Shipping Conditions: Clean, dry area. Do not heat above 125°F.

Date Prepared: 6/9/86

Prepared By: Steve Nelson

ORIGINAL (Red)

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

HMIS: 120

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

#17699

IDENTITY *(As Used on Label and List)* STRIP-ALL

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufactured For ALPHA SYSTEMS UNLIMITED, INC.	Emergency Telephone Number
Address *(Number, Street, City, State, and ZIP Code)* P.O. BOX 8784	Telephone Number for Information (305) 752-0552
CORAL SPRINGS, FLORIDA	Date Prepared SEPTEMBER 6, 1986
33065	Signature of Preparer *(optional)*

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*
ETHYLENE GLYCOL-n-BUTYL ETHER (111-76-2)	50ppm	25ppm	MAK:20ppm	5-10%
POTASSIUM HYDROXIDE (1310-58-3)		CL 2 mg/m^3		5-10%

Section III — Physical/Chemical Characteristics

Boiling Point EXCEEDS	212°F	Specific Gravity (H_2O = 1)	1.001
Vapor Pressure (mm Hg.)	ND	Melting Point	NA
Vapor Density (AIR = 1)	> 1	Evaporation Rate (Butyl Acetate = 1)	> 1

Solubility in Water 100%

Appearance and Odor CLEAR PURPLE LIQUID WITH BUTYL ODOR.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) 160°F. (COC)	Flammable Limits	LEL 1.1	UEL 10.6

Extinguishing Media CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL FOAM.

Special Fire Fighting Procedures KEEP DRUMS AND CONTAINERS EXPOSED TO FIRE AND HEAT COOL WITH WATER SPRAY.

AR200824

Unusual Fire and Explosion Hazards MODERATE FIRE HAZARD WHEN EXPOSED TO HEAT, OPEN FLAME OR POWERFUL OXIDIZERS.

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		HEAT AND FLAMES
	Stable	XXX	

Incompatibility (*Materials to Avoid*) POWERFUL OXIDIZERS

Hazardous Decomposition or Byproducts TOXIC GASES AND VAPORS MAY BE RELEASED IN A FIRE.

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	XXX	

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? MODERATE Skin? MODERATE Ingestion? ORAL

Health Hazards (*Acute and Chronic*) IRRITATION OF THE EYES, NOSE AND THROAT AND MAY CAUSE URINE TO BE RED AFTER MAJOR INHALATION.

Carcinogenicity: NTP? NO IARC Monographs? NO OSHA Regulated? NO

Signs and Symptoms of Exposure EYE AND OR MUCOUS MEMBRANE IRRITATION SHOULD BE NOTED FIRST.

Medical Conditions Generally Aggravated by Exposure RESPIRATORY TRACT PROBLEMS MAY BECOME AGGRAVATED.

Emergency and First Aid Procedures EYES: IRRIGATE IMMEDIATELY. SKIN: WASH WITH SOAP & WATER. REMOVE VICTIM TO FRESH AIR. INTERNAL: GET MEDICAL ATTENTION: GIVE SALT WATE AND INDUCE VOMITTING IF NOT UNCONSCIOUS.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled FOR SMALL QUANTITIES ABSORB WITH PAPER TOWELS AND ALLOW TO EVAPORATE IN FUME HOOD. FOR LARGE QUANTITIES ABSORB WITH CLAY-TYPE ABSORBENT AND SWEEP TO CONTAINMENT AREA.

Waste Disposal Method MAY BE INCINERATED OR IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

Precautions to Be Taken in Handling and Storing KEEP UNUSED CONTAINER CLOSED. KEEP AWAY FROM HEAT, SPARKS AND FLAMES.

Other Precautions AVOID PROLONGED CONTACT WITH MANY PLASTICS AND RESINS.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*) FOR VERY LARGE SPILLS BREATHING APPARATUS IS REQUIRED.

Ventilation		
	Local Exhaust: STANDARD VENTILATION	Special:
	Mechanical (*General*): ONLY IF ABOVE IS INSUFFICIENT	Other:

Protective Gloves: RUBBER OR PVC Eye Protection: GOGGLES OR FACE SHIELD

Protective Clothing or Equipment: EMERGENCY EYE WASH AND SAFETY SHOWER.

Work/Hygienic Practices: WASH EFFECTED AREAS IMMEDIATELY UPON CONTACT.

U.S.G.P.O. 1988-491-529/45275

ORIGINAL FILE

BUTCHER'S

Material Safety Data Sheet

00330

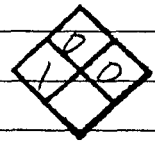
Manufacturer's Name	The Butcher Polish Company	Emergency Telephone No	(617) 481-5700
Address	120 Bartlett Street, Marlborough, MA 01752		
Signature of Person Responsible for Preparation	Bonita C Patterson	Date Prepared	March 19, 1985

IDENTITY

Common Name (used on label) Trade Name & Synonyms) SUNBONNET Lemon Wax

INGREDIENT INFORMATION

Principal Hazardous Component(s) (chemical & common name(s))	CAS No	%	Threshold Limit Value (units)
Mineral Spirits	64741-65-7	15-10	NE
Butane	106-97-8	6-9	800ppm
Propane	74-98-6	1-3	1000ppm



PPE B

UN 1142

PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	212°F			Specific Gravity (H_2O = 1)	NA	Vapor Pressure	30-34 psig @ 64°F
Percent Volatile by Volume (%)	NA	Vapor Density (Air = 1)	ND	Evaporation Rate (_____ = 1)	ND		
Solubility in Water	Dispersible						
Appearance and Odor	Aerosol product; lemon odor						

Flash Point	NA	Flammable Limits in Air % by Volume	Lower ND	Upper		Extinguisher Media	Foam, CO_2, dry chemical

Special Fire Fighting Procedures: This product is not flammable as per 16 CFR 1500.45. Cool uninvolved containers with water. Full protective equipment should be worn when this product is involved in a fire.

Unusual Fire and Explosion Hazards: Contents under pressure. Container may explode if exposed to excessive heat.

RECEIVED
SEP 30 1986
C. MURAWCZYK

AR200826

ND = Not Determined NE = Not Established NA = Not Applicable

BUTCHER'S

Common Name (used on label)
Trade Name & Synonyms) SUNBONNET Lemon Wax

REACTIVITY DATA

Stability: Unstable ☐ Conditions
Stable ☒ to Avoid None known

Incompatibility
(Materials to Avoid) None known to THE BUTCHER POLISH COMPANY.

Hazardous
Decomposition Products Normal products of combustion.

Hazardous
Polymerization May Occur ☐ Conditions
Will Not Occur ☒ to Avoid None known to THE BUTCHER POLISH COMPANY.

HAZARD DATA

Signs and
Symptoms of Overexposure Direct contact of product with eyes may cause irritation. Prolonged or repeated contact of product with skin may cause irritation. Preexisting eye disorders may be aggravated.

Chemical Listed as Carcinogen
or Potential Carcinogen None

Emergency and
First Aid Procedures

1 Inhalation Remove to fresh air. Call a physician if symptoms persist.

2 Eyes Flush with water for at least 15 minutes. Call a physician if irritation develops.

3 Skin Flush with water. Call a physician if irritation develops.

4 Ingestion Drink large quantities of water. Do not induce vomiting. Call a physician.

SPECIAL PROTECTION INFORMATION

Respiratory Protection None required if good ventilation is maintained.

Protective
Gloves If prolonged or repeated contact is possible wear rubber or other impervious gloves.

Eye
Protection Where eye contact may be a problem, wear chemical splash goggles.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken
in Handling and Storage Use good personal hygiene practice. Wash contaminated clothing and equipment before reuse.

Steps to be Taken in Case
Material is Released or Spilled Before attempting clean-up, refer to Hazard Data above. Wipe up spill and wash area with detergent solution.

Waste Disposal
Methods Dispose of this material in accordance with federal, state and local regulations.

AR200827

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.

ORIGINAL (Red)

BUTCHER'S

Material Safety Data Sheet

00640

Manufacturer's Name	The Butcher Polish Company	Emergency Telephone No	(617) 481-5700
Address	120 Bartlett Street, Marlborough, MA 01752		
Signature of Person Responsible for Preparation	Bonita C Patterson	Date Prepared	March 19, 1985

IDENTITY

Common Name (used on label) Trade Name & Synonyms) SUNDANCE Floor Cleaner

INGREDIENT INFORMATION

Principal Hazardous Component(s) (chemical & common name(s))	CAS No	%	Threshold Limit Value (units)
This product is not hazardous as per 29 CFR 1910.1200.			

PPE B

UN 1142

PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	212°F			Specific Gravity (H_2O = 1)	1.01	Vapor Pressure	ND
Percent Volatile by Volume (%)	96	Vapor Density (Air = 1)	ND	Evaporation Rate (_____ = 1)	ND		
Solubility in Water	Complete						
Appearance and Odor	Slightly opaque yellow liquid; new mown hay odor.						
Flash Point	200°F +	Flammable Limits in Air % by Volume	Lower ND	Upper	Extinguisher Media	NA	
Special Fire Fighting Procedures	This product is not flammable.						
Unusual Fire and Explosion Hazards	None known to THE BUTCHER POLISH COMPANY.						

RECEIVED
SEP 30 1985
C. MURAWCZYK
AR200828

ND = Not Determined NE = Not Established NA = Not Applicable

BUTCHER'S

Common Name (used on label)
Trade Name & Synonyms) SUNDANCE Floor Cleaner

REACTIVITY DATA

Stability Unstable ☐ Conditions
Stable ☒ to Avoid None known

Incompatibility
Materials to Avoid None known to THE BUTCHER POLISH COMPANY.

Hazardous
Decomposition Products Normal products of combustion.

Hazardous
Polymerization May Occur ☐ Conditions
Will Not Occur ☒ to Avoid None known to THE BUTCHER POLISH COMPANY

HAZARD DATA

Signs and
Symptoms of Overexposure Direct contact of product with eyes may cause mild irritation.

Prolonged or repeated contact of product with skin may cause irritation.

Chemical Listed as Carcinogen
or Potential Carcinogen None

Emergency and
First Aid Procedures

1 Inhalation Remove to fresh air. Call a physician if symptoms persist.

2 Eyes Flush with water for at least 15 minutes. Call a physician if irritation develops.

3 Skin Flush with water. Call a physician if irritation develops.

4 Ingestion Drink large quantities of water. Do not induce vomiting. Call a physician.

SPECIAL PROTECTION INFORMATION

Respiratory Protection None required if good ventilation is maintained.

Protective
Gloves If prolonged or repeated contact is possible wear rubber or other impervious gloves.

Eye
Protection Where eye contact may be a problem, wear chemical splash goggles.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken
in Handling and Storage Use good personal hygiene practice. Wash contaminated clothing and equipment before reuse.

Steps to be Taken in Case
Material is Released or Spilled Before attempting clean-up, refer to Hazard Data above. Use mop or wet vacuum to collect material for proper disposal. Rinse area with water.

Waste Disposal
Methods Dispose of this material in accordance with federal, state and local regulations.

AR200829

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user

Hi-Shine Oligymer Finish 17%	Floor Finish	H17
Bullen Trade Name	Type Product	Code

PREPARED BY BULLEN CHEMICAL CO., DELMAR DR., BOX 37, FOLCROFT, PA 19032 • EMERGENCY PHONE 215/724-8100

MATERIAL SAFETY DATA SHEET

(Prepared According to 29 CFR 1910. 1200)

Date Prepared ~~12/16/85~~

SECTION 1 - PRODUCT IDENTIFICATION

Distributor Name: ZIMMERMAN	Emergency Telephone No.
Address	
Trade Name: SUPER GLOSS WAX	Product Type

SECTION 2 - HAZARDOUS INGREDIENTS

CHEMICAL NAME/COMMON NAME	CAS NO.	PERCENT (optional)	TLV (Source)
Acrylic copolymer (Trade secret)	Mixture		Not established

PPE B

UN 1142

Other Ingredients in Product are [x] Less than 1% by Weight or Less than 0 1% for Carcinogens [x] Not Hazardous [x] Declared to be Trade Secrets

SECTION 3 - PHYSICAL DATA

Boiling Point (°F): Near 212	Specific Gravity (H_2O = 1.0): 1.020 ±0.005	pH: 8.5 ±0.5	
Vapor Pressure (mmHg): Not known	Vapor Density (Air = 1): Not known		
Solubility in Water	[ ] Complete	[ ] Insoluble	[x] Emulsifiable (or dispersible) [ ] Slight (or partial)
Evaporation Rate (vs H_2O)	[ ] Faster	[x] Slower	[ ] About the Same

Appearance and Odor: Milky liquid, characteristic odor

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (T.C.C.)	[x] None to Boiling	Flammable Limits	Upper: Not known Lower: Not known

Extinguishing Media: CO_2, dry chemical, foam, water spray

Special Fire Fighting Procedures: None known

RECEIVED SEP 26 1986 C. MURAWCZYK

Unusual Fire and Explosion Hazards: Product will not burn but may splatter if temperature exceeds boiling point. Polymer films are capable of burning.

AR200830

SECTION 5 - REACTIVITY DATA

[x] Stable [ ] Unstable | Incompatibility: N/A

Hazardous Decomposition Products: Carbon monoxide and other unidentified organic compounds may occur during incomplete combustion.

SECTION 6 - HEALTH HAZARDS

Threshold Limit Value - Product (See Section 2 for Ingredient TLV) [x] None Established [ ] Not Applicable Source

Primary Routes of Exposure [x] Eye [ ] Skin [ ] Oral [ ] Inhalation [ ] Other

Signs and Symptoms of Overexposure (Acute) Eyes: redness, irritation. Effects of overexposure to compositionally similar products (typical values). Rat oral LD_{50}>5 gm/kg; rabbit, dermal LD_{50}>75 gm/kg; rabbit, skin irritation: practically non-irritating. 72 hr. mean irritation score =0 to 2; rabbit, eye irritation: mild to moderate irritation.

Signs and Symptoms of Overexposure (Chronic) Skin: repeated or prolonged exposure may cause skin irritation. Inhalation of vapors or spray mists in poorly ventilated areas may cause irritation of the mucous membranes with symptoms of headache and nausea.

Medical Conditions Aggravated by Overexposure

Not known

Carcinogen or Suspect Carcinogen Ingredients: [ ] NTP [ ] ARC [ ] OSHA [x] None

SECTION 7 - EMERGENCY AND FIRST AID PROCEDURES IN CASE OF OVEREXPOSURE

Eyes Flush with water for at least 15 minutes. If persistent irritation occurs, call physician.

Skin Wash thoroughly with soap and water.

Ingestion Give two glasses of water to drink. Call a physician.

Inhalation

Remove exposed person to fresh air. Treat symptomatically.

SECTION 8 - SPECIAL PROTECTION INFORMATION

Respiratory Protection Not needed under normal conditions of use.

Ventilation Requirements [ ] Local Exhaust [x] Mechanical [ ] Other

Protective Gloves impervious

Eye Protection safety glasses or goggles

Other Protective Clothing

N/A

SECTION 9 - SPILL OR LEAK PROCEDURES

Steps to be Taken if Released or Spilled Dike and contain spill with suitable absorbent and collect for disposal. Floors may be slippery. Care should be exercised to avoid falls.

Waste Disposal Methods . . .

Dispose of in accordance with applicable federal, state and local ordinances.

AR200831

SECTION 10 - STORAGE AND HANDLING INFORMATION

Precautions to be Taken in Handling and Storage

Avoid freezing. Product may coagulate. Use with adequate ventilation. Avoid contact with eyes. WAsh thoroughly after handling.

Material Safety Data Sheet

ORIGINAL (Red)

SECTION I — IDENTITY AND MANUFACTURER'S INFORMATION

Manufacturer's Name: Canberra Corporation

Product Name: ZENE Bowl Cleaner (23% HCl)

Address: 3610 Holland-Sylvania Rd.
Toledo, OH 43615

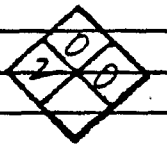
Date Prepared: 4-10-86

Emergency Telephone No. And Other Information Calls: 419-841-6616

Prepared by Regulatory Affairs Department

SECTION II — HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components (Specific Chemical Identity: Common Name(s)	CAS #'s	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (Optional)
Hydrochloric Acid	7647-01-0	N/A	5 ppm	N/A	23.0%
N-Alkyl Dimethylbenzyl Ammonium Chloride	68391-01-5	N/A	N/A	N/A	0.05



PPE C

UN 1760

SECTION III — PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	N/A	Specific Gravity (H_2O = 1)	1.122
Vapor Pressure (mm Hg.)	N/A	Percent Volatile By Volume (%)	> 95%
Vapor Density (AIR = 1)	N/A	Evaporation Rate (_____ = 1)	N/A
Solubility in Water	Complete	Appearance and Odor	Pink liquid/pungent odor

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None

Flammable Limits: LEL N/A UEL N/A

Extinguishing Media: N/A

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards: Release of corrosive hydrogen chloride gas may result at elevated temperatures.

SECTION V — PHYSICAL HAZARDS

Stability: Unstable ☐ Stable ☒ Conditions to Avoid: Contact with light metals may generate hydrogen gas.

Incompatability (Materials to Avoid): Ammonia;Bleach - Do not mix with other chemicals.

Hazardous Decomposition Products Or Byproducts: Chlorine Gas; Hydrogen Gas

Hazardous Polymerization: May Occur ☐ Will Not Occur ☒ Conditions To Avoid: N/A

RECEIVED
OCT 14 1986
AR200832
C. MURAWCZYK

SECTION VI — HEALTH HAZARD DATA

Route(s) of Entry. Inhalation? X Skin? X Ingestion? X

Health Hazards (1 Acute and 2 Chronic) Acute -Causes chemical burns. Chronic - no information on chronic health hazard is currently available.

Chemical Listed as Carcinogen or Potential Carcinogen — National Toxicology Program: Yes ☐ No ☒ — I.A.R.C. Monographs: Yes ☐ No ☒ — OSHA: Yes ☐ No ☒

Signs and Symptoms of Exposure Irritation,burning of mucous membranes and respiratory system.

Medical Conditions Generally Aggravated by Exposure Persons with respiratory ailments may find those conditions aggravated during personal use of this product.

Emergency and First Aid Procedures Eye contact-Immediately flush eye with plenty of water for 15 minutes. Get medical attention. Skin Contact-Flush skin immediately with cool water. Wash with soap and water. Remove contaminated clothing. Inhalation -Remove to fresh air. Get medical attention. Ingestion - Do not induce vomiting. Give milk, water or egg whites and get medical attention immediately.

SECTION VII — PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled

Contain spill and collect in approved container. Ventilate area to dissipate fumes. Rinse with dilute bicarbonate solution to neutralize residue.

Waste Disposal Method Waste or unused material may be rendered non-hazardous by neutralization with dilute alkaline solution. Caution-Never add concentrated alkali to this product. Triple rinse container, wrap and discard in trash.

Precautions To Be Taken In Handling And Storing Keep container closed when not in use. Use with toilet bowl mop or applicator. Use only according to label directions. Do not mix with other chemicals.

Other Precautions Keep out of reach of children. Avoid contact with skin or eyes. Avoid prolonged breathing of vapor.

SECTION VIII — CONTROL MEASURES

Respiratory Protection (Specify Type) Not normally required

Ventilation: Local Exhaust X — Mechanical (General) Adequate — Special ----------Not required---------- — Other

Protective Gloves: Rubber — Eye Protection: Face shield and/or chemical goggles

Other Protective Clothing Or Equipment: Rubber apron and boots recommended

Work/Hygienic Practices: Good housekeeping practices apply.

NOTICE: NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY OTHER NATURE, ARE MADE WITH RESPECT TO INFORMATION CONCERNING THE PRODUCT REFERRED TO IN THIS MATERIAL SAFETY DATA SHEET. The goal of defining precisely, in measurable terms, every possible health effect that may occur in the workplace as a result of chemical exposures cannot realistically be accomplished. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 C.F.R. 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of the date hereof. Canberra Corporation, however, makes no representations as to the completeness or accuracy thereof, and information is supplied upon the express condition that the persons receiving same will be required to make their own determination as to its suitability for their purposes prior to use. In no event will Canberra Corp. be responsible for any damages of any nature whatsoever resulting from the use of, reliance upon, or the misuse of this information. The information as supplied herein is simply to be informative and intended solely to alert the user of the substance which is the subject matter of this Material Safety Data Sheet. The ultimate compliance with federal, state or local regulations concerning the use or disposal of this compound, or compliance with respect to products liability, rests solely upon the purchaser thereof.

GORDON'S®

PROFESSIONAL TURF PRODUCTS

Product Information

ORIGINAL (Red)

YOUR GUARANTEE OF A TRIMEC® COMPLEX PROFESSIONAL QUALITY

TRIMEC®
BROADLEAF HERBICIDE
WIDE-SPECTRUM WEED CONTROL

TRIMEC® IS #1 BECAUSE:

- Controls the widest range of broadleaf weeds
- Gets hard-to-kill species without repeated applications
- Gives wide margin of safety to lawn grasses
- Minimum hazard from root absorption to nearby flowers and ornamentals, deciduous and coniferous trees and shrubs
- No vapor action after application
- Effective weed control at a wide range of temperatures
- Sequestered to overcome water-hardness problems
- Treated areas may be seeded within two weeks
- Non-flammable and non-corrosive in use
- Product stable for several years but subject to freezing at temperatures below 32° F.
- Biodegradeable: friendly to the environment

ONLY TRIMEC® HAS THEM ALL

Read label before use.

GORDON'S PROFESSIONAL TURF PRODUCTS

pbi/gordon corporation

1217 WEST 12th STREET
P.O. BOX 4090
KANSAS CITY, MISSOURI 64101
816/421-4070

TRIMEC is the most effective and most efficient broadleaf herbicide available. It positively controls the widest spectrum of broadleaf weeds, including hard-to-kill species, usually with only one application.

TRIMEC's cost-per-acre is low because the synergistic (more-than-additive) action of its components is fully effective with small amounts of chemicals. This also helps provide a wide margin of safety to lawn grasses, flowers and ornamentals (deciduous and coniferous) because root absorption is minimal.

TRIMEC has been thoroughly proven in commercial use in all parts of the United States, in all kinds of weather. Its effectiveness in cool temperatures — even below 50° F. — is firmly established when weeds are growing, allowing early-spring and early-winter use. TRIMEC is the best available weed control for golf courses, lawns, cemeteries, along highways, on sod farms, in public parks — wherever immaculate turf must be maintained.

RECOMMENDED USES

Broadleaf weed control in turf: golf courses, lawns, cemeteries, along ditchbanks and highways, on sod farms, public parks.

ACTIVE INGREDIENTS

2,4-D, MCPP and Dicamba (see label on back).

PACKAGING

U.S. Gallons: 6 x 1 cans per case:
shipping weight ..... 64 lbs.
2½-gallon plastic jugs: 2 x 2½ per case:
shipping weight ..... 45 lbs.
5-gallon can (while available): shipping weight ..... 52 lbs.
30-gallon drum: shipping weight ..... 308 lbs.
55-gallon drum: shipping weight ..... 575 lbs.

AR200834

G-12b-85

STOP! READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

PRECAUTIONARY STATEMENTS
Hazards to Humans & Domestic Animals

DANGER Corrosive, causes eye damage and skin irritation. Do not get in eyes, on skin or on clothing. Wear goggles, face shield, or safety glasses, and rubber gloves when handling. Harmful if swallowed or inhaled. Avoid exposure to spray mist. Wash thoroughly after handling.

Environmental Hazards

Do not apply directly to any body of water. Do not apply when weather conditions favor drift away from target area. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not contaminate domestic or irrigation waters.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

STORAGE & DISPOSAL

Storage: Store in original container in a locked storage area. Keep from freezing. To avoid cross-contamination, do not store near other pesticides, fertilizers, or seeds.

Product Disposal: Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

USE PRECAUTIONS:

Avoid drift of spray mist to vegetables, flowers, ornamental plants, shrubs, trees and other desirable plants. Do not pour spray solutions near desirable plants. Do not use on carpetgrass, dichondra, nor on lawns or turf where desirable clovers are present. Use only lawn-type sprayers. Avoid fine sprays, coarse sprays are less likely to wind-drift. Do not spray roots of ornamentals and trees. Do not exceed specified dosages for any area, be particularly careful within the dripline of tree and other ornamental species. Do not apply to newly seeded grasses until well established. Do not spray when air temperature exceeds 85 degrees F. Seed can be safely sown 3 to 4 weeks after application. Some injury can be expected to turf when used on centipede or St. Augustine grass lawns. "Spot-spray" weeds on these types of grasses to avoid possible damage that could occur from an over-all spraying. After using this product, clean sprayer with soap or detergent and rinse thoroughly before using other pesticides in it. Care should be taken not to make applications where runoff could contaminate bodies of water or spray drift could carry the chemical to food crops or grazing lands where cattle, sheep, goats, swine or poultry would be exposed.

881/684
EPA REG. NO 2217-543
EPA EST. NO 2217-KS-1

pbi/gordon corporation
KANSAS CITY, KANSAS 66118

© 1979 and 1980, PBI/GORDON CORPORATION

GORDON'S ®
PROFESSIONAL TURF PRODUCTS

TRIMEC®
BROADLEAF HERBICIDE

ONE GALLON COVERS 2-2½ ACRES

KILLS: Dandelion, Chickweed, Knotweed, Plantains, Henbit, Spurge, Kudzu and many other species of broadleaf weeds, some of which are listed on this label

KEEP FROM FREEZING

YOUR GUARANTEE OF TRIMEC COMPLEX PROFESSIONAL QUALITY ®

ACTIVE INGREDIENTS:

*Dimethylamine Salt of 2,4-Dichlorophenoxyacetic acid	25.93%
**Dimethylamine Salt of 2-(2-methyl-4-chlorophenoxy) propionic acid	13.85%
***Dimethylamine Salt of Dicamba (3,6-dichloro-o-anisic acid)	2.76%
INERT INGREDIENTS	57.46%
TOTAL	100.00%

THIS PRODUCT CONTAINS:

*2.03 lbs. 2,4-Dichlorophenoxyacetic acid per gallon or 21.54%
**1.08 lbs. 2-(2-methyl-4-chlorophenoxy) propionic acid per gallon or 11.45%.
***0.21 lb. 3,6-dichloro-o-anisic acid per gallon or 2.29%.
*Isomer Specific by AOAC Method 6.DO1-5.

KEEP OUT OF REACH OF CHILDREN
DANGER

Statement of Practical Treatment

If In Eyes: In case of eye contact, immediately flush eyes with plenty of water for 15 minutes. Call a physician at once.

If On Skin: Wash promptly with soap and water. Rinse thoroughly. If irritation develops, get medical attention.

If Swallowed: Drink one or two glasses of water. Induce vomiting by touching back of throat with finger. Call a physician at once. Do not induce vomiting or give anything by mouth to an unconscious person.

If Inhaled: Remove victim to fresh air and apply respiration if indicated.

See additional precautionary statements elsewhere on this label.

TRIMEC® is a registered trademark of PBI/GORDON CORPORATION. U.S. Patent No. 3,284,186

ORNAMENTAL LAWNS & TURF (cool season grasses other than closely-mowed Bentgrass)

Maximum kill of weeds will be obtained from spring or early fall applications when weeds are actively growing. Avoid spraying during long, excessively dry or hot periods unless adequate irrigation is available. Do not irrigate within 24 hours after application. Do not apply to newly seeded turf until after the second or third mowing. Grass seed can be safely sown 3 to 4 weeks after application at recommended rates. Do not use on dichondra, carpetgrass, or St. Augustine grass.

General Application: Apply at the rate of 3¼ to 4 pints in 20 to 260 gallons of water per acre (1.2 oz. to 1.5 oz. in 1 to 6 gallons of water per 1,000 square feet). Use higher rates when using the higher volume of water per acre.

Controlled Droplet Applicator: Add 2½ pints to the HERBI container and fill with water. Spray contents over 33,000 square feet. Avoid overlapping between spray patterns.

Bentgrass Turf: On closely-mowed bentgrass (putting greens, bowling greens and show lawns), apply at the maximum rate of 1 oz. per 1,500 square feet in 5 gallons of water. Do not apply when grass is under stress from drought or hot temperatures. Use only application equipment that is capable of distributing a uniform droplet over the entire area to be sprayed. Slight yellowing of turf will disappear after about one week.

Note: Care should be taken to avoid overdosing bentgrasses or injury may result. If hand-type sprayers are used it is preferable to use a single nozzle sprayer rather than a multiple nozzle boom as sideways application with a boom where the spray from more than one nozzle is allowed to fall on the same area will result in heavy local overapplication and subsequent turf discoloration or injury.

WEEDS

Bedstraw	Henbit	Purslane
Black Medic	Knotweed	Ragweed
Buckhorn	Lambequarters	Sheep Sorrel
Burdock	Lespedeza	Shepherd's Purse
Chicory	Mallow	Speedwell
Chickweed	Morning Glory	Spurge
Clover	Peppergrass	Wild Carrot
Dandelion	Pigweed	Wild Garlic
Dock	Plantains	Wild Lettuce
Ground Ivy	Poison Ivy	Wild Onion
Heal-all	Poison Oak	Yarrow

WARRANTY:

The manufacturer warrants that the chemical composition conforms to the ingredient statement given on the label and that this product is suited for the labeled uses when applied according to label directions. Because of widely varying use conditions, it is impossible to eliminate all risks even when label directions are followed. Therefore, the manufacturer makes no other implied or express warranty nor is any agent of the manufacturer allowed to do so. Upon purchase of this product, the buyer assumes all risks associated with use of this product. In the event of damage resulting from a breach of warranty the buyer agrees to accept a refund of the purchase price of the product as full discharge of the manufacturer's liability.

ORIGINAL (Red)

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY *(As Used on Label and List)* TRADE SECRET
UNBELIEVABLE! stain remover

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

ORIGINAL (Red)

Section I

Manufacturer's Name: Core Products Co., Inc.	Emergency Telephone Number: 214+352-9778
Address *(Number, Street, City, State, and ZIP Code)*: P.O. Box 153896-Irving,TX.75015-3896	Telephone Number for Information: 214-352-9778
2614 Andjon Drive-Dallas, TX. 75220	Date Prepared: April 14, 1986
	Signature of Preparer *(optional)*: Teresa A. Heffner — Teresa A. Heffner

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*

NO HAZARDOUS MIXTURES None as per 29 CFR 1910.1200.

WITH ACCORDANCE TO THE FEDERAL'RIGHT TO KNOW" LAW

No C.A.S. Numbers required

RECEIVED
SEP 26 1986
C. MURAWCZYK

Section III — Physical/Chemical Characteristics

Boiling Point	214*F	Specific Gravity (H_2O = 1)	1.05
Vapor Pressure (mm Hg.) @ 75*F	22.377mm	Melting Point	
Vapor Density (AIR = 1)		Evaporation Rate (Butyl Acetate = 1)	

Solubility in Water: Stable

Appearance and Odor: Clear in color. Odorless

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used): COC*F 500*F	Flammable Limits	LEL	UEL

Extinguishing Media: Water, Fog-Foam

Special Fire Fighting Procedures: None

AR200836

Unusual Fire and Explosion Hazards: None

PPE B

UN 1492

(Reproduce locally)

OSHA 174, Sept. 1985

Section V — Reactivity Data

Stability			Conditions to Avoid
Stable	Unstable		
	Stable		None

Incompatibility (*Materials to Avoid*)

Hazardous Decomposition or Byproducts

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	XX	

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? Skin? Ingestion?

Health Hazards (*Acute and Chronic*)

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

Signs and Symptoms of Exposure

Medical Conditions Generally Aggravated by Exposure

Emergency and First Aid Procedures

If taken internally--Drink 16 fl. oz. of water Eyes--Flush with water until clear Skin Irritation--Non Irritating to skin

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled

Air Dry, Mop Dry

Waste Disposal Method

Standard Drainage-Non harmful to Metals, Aluminum, and PVC type Drainage

Precautions to Be Taken in Handling and Storing

Storage of finished cases should never extend 5 high. Temperatures in storage should be above 28* F to prevent freezing and below 140* F to prevent expansion. Finished cases should always be stored or shipped in an upright position to prevent leakage

Other Precautions

Section VIII — Control Measures

Respiratory Protection (*Specify Type*)

None Required

Ventilation		
None Required	Local Exhaust	Special
	Mechanical (*General*)	Other

AR200837

Protective Gloves: Non Irritant to skin

Eye Protection: Not normally necessary(Chemical goggles may be worn)

Other Protective Clothing or Equipment

Work/Hygienic Practices

* U.S.G.P.O. 1986-491-529/45775

XEROX

Material Safety Data Sheet

MSDS No.: 0223
Date: Jan. 18, 1983
Revision: May 27, 1986

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

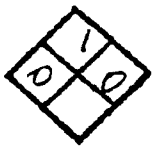
Section I - Product Identification

Trade Names/Synonyms: 1040/1045/1048/1050 Developer

Part No. : 5R111, 5R127, 5R139, 5R140, 5R507, 5R505, 5R509

Chemical Name: None

Ingredients	CAS No.
Carrier (>95%):	
Iron Powder (>95%)	----------
Polymethylmethacrylate (<5%)	9011-14-7
Toner (<5%):	
Styrene, Acrylate Copolymer (85-90%)	25213-39-2
Carbon Black (10-15%)	1333-86-4
Amorphous Silica (<1%)	7631-86-9



PPE A

UN NA

Section II - Emergency and First Aid

RECEIVED
OCT 14 1986
C. MURAWCZYK

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been tested and evaluated by Xerox Corporation. When used as intended, it does not represent a health or safety hazard.

Oral LD_{50}: >16 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2.3 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >7.5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) mildly irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: No mutagenicity detected in Ames Assay.
Carcinogens: None present
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m³ (Total Dust)
5 mg/m³ (Respirable Dust)

PEL: 15 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

¹XEL: 5 mg/m³ (Total Dust)

AR200838

Additional Information: The information noted above is toxicity data for toner. *Not tested to the highest dose or concentration.

¹XEL - Xerox Exposure Limit

Section IV - Physical Data

Appearance/Odor: Black, granular / faint odor
Boiling Point: N.A.
Solubility in Water: N.A.
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. **% (Wgt.)** N.A. **% (Vol.)**

Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H_2O = 1): N.A.
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits **LEL:** N.A. **UEL:** N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: If spilled, sweep up or vacuum.

Waste Disposal Method: No special disposal procedures. Insure conformity with federal, state or local regulations.

AR200839

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A. **ID Number:** N. A.

XEROX

Material Safety Data Sheet

MSDS No.: 0024
Date: Jan. 17, 1983
Revision: May 27, 1986

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

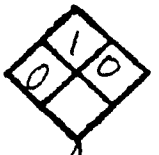
Trade Names/Synonyms: 1040/1045/1048/1050 Toner

Part No. : 6R112, 6R113, 6R128, 6R119

Chemical Name: None

Ingredients	CAS No.
Styrene, Acrylate Copolymer (85-90%)	25213-39-2
Carbon Black (10-15%)	1333-86-4
Amorphous Silica (<1%)	7631-86-9

ORIGINAL (Red)



PPE A

UN NA

Section II - Emergency and First Aid

RECEIVED
OCT 14 1986
C. MURAWCZYK

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been tested and evaluated by Xerox Corporation. When used as intended, it does not represent a health or safety hazard.

Oral LD_{50}: >16 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2.3 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >7.5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non- irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) mildly irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: No mutagenicity detected in Ames Assays.
Carcinogens: None present
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic
Additional Information: *Not tested to the highest dose or concentration.

TLV: 10 mg/m³ (Total Dust)
5 mg/m³ (Respirable Dust)

PEL: 15 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

[1]XEL: 5 mg/m³ (Total Dust)

AR200840

[1]XEL - Xerox Exposure Limit

Section IV - Physical Data

Appearance/Odor: Black powder / faint odor
Boiling Point: N.A.
Solubility in Water: Negligible
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. **% (Wgt.)** N.A. **% (Vol.)**

Softening Range: 85°C to 100°C
Melting Point: N.A.
Specific Gravity (H_2O = 1): 1
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits **LEL:** N.A. **UEL:** N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Loose toner can be removed using a vacuum cleaner. Residue can be removed with soap and cold water. After removal of loose toner, garments may be washed or dry cleaned.

Waste Disposal Method: Do not incinerate. No special techniques beyond normal practice. Insure conformity with federal, state or local regulations.

AR200841

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A. **ID Number:** N. A.

XEROX

Material Safety Data Sheet

MSDS No.: 0222
Date: Sept. 30, 1982
Revision: July 15, 1986

Manufacturer: Xerox Corporat on
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

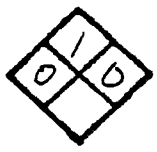
Section I - Product Identification

Trade Names/Synonyms: 1075/1090/4050 Developer

Part No. : 5R300, 5R302, RX: 5R306, 5R307, 5R510

Chemical Name: None

Ingredients	CAS No.
Carrier (95-100%):	
Steel powder	----------
Toner (<5%):	
Styrene, Acrylate Copolymer (>90%)	25213-39-2
Carbon black (5-10%)	1333-86-4
Quaternary Ammonium Salt (<2%)	123-03-5



PPE A

UN NA

RECEIVED
OCT 1 4 1986
C. MURAWCZYK

Section II - Emergency and First Aid

Eyes: Flush with water
Skin: Wash with soap and water
Inhalation: Remove from exposure
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been tested and evaluated by Xerox Corporation. When used as intended, it does not represent a health or safety hazard.

Oral LD_{50}: >10 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) minimally to mildly irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: 0.34 (Rabbits) mildly irritating
Human Patch: Non-sensitizing, minimally irritating
Mutagenicity: No mutagenicity detected in Ames, Mouse Lymphoma, CHO/SCE, Micronucleus, and 3T3 Transformation Assays.
Carcinogens: None present
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m³ (Total Dust)
5 mg/m³ (Respirable Dust)

PEL: 15 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

[1]XEL: 5 mg/m³ (Total Dust)

AR200842

Additional Information:* Not tested to the highest dose or concentration. Subchronic Inhalation (Rats)/ (-); Inhalation Teratology/ (-); Biodegradation/not readily biodegradable. Test results noted above are based on toxicity data for toner.

[1]XEL - Xerox Exposure Limit (for Ocular toxicity)

Trade Name: 1075/1090/4050 Developer | MSDS No.: 0222

Section IV - Physical Data

Appearance/Odor: Black, granular / faint odor
Boiling Point: N.A.
Solubility in Water: Negligible
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: 85°C to 100°C
Melting Point: N.A.
Specific Gravity (H_2O = 1): N.A.
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Unusual Fire and Explosion Hazards: Developer is combustible. When dispersed in air, it forms explosive mixtures. By the U.S. Bureau of Mines format, the Explosion Severity = 3.5 and is considered "Strong". The Kst following NFPA #68 procedures is 236 bar-meters/sec.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: If spilled, sweep up or vacuum

Waste Disposal Method: No special disposal procedures. Insure conformity with federal, state , or local regulations.

Section X - Transportation Information

AR2008

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A. **ID Number:** N. A.

XEROX

Material Safety Data Sheet

MSDS No.: 0023
Date: Sept. 30, 1982
Revision: July 15, 1986

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1075/1090/4050 Toner

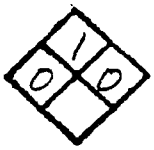
Part No. : 6R58, 6R301, RX: 6R303, 6R306, 6R501

Chemical Name: Thermoplastic powder

Ingredients	CAS No.
Styrene, Acrylate Copolymer (>90%)	25213-39-2
Carbon black (5-10%)	1333-86-4
Quaternary Ammonium Salt (<2%)	123-03-5

ORIGINAL (Red)

RECEIVED
OCT 14 1986
C. MURAWCZYK



PPE A
UN NA

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been tested and evaluated by Xerox Corporation. When used as intended, it does not represent a health or safety hazard.

Oral LD_{50}: >10 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) minimally to mildly irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: 0.34 (Rabbits) mildly irritating
Human Patch: Non-sensitizing, minimally irritating
Mutagenicity: No mutagenicity detected in Ames, Mouse Lymphoma, CHO/SCE, Micronucleus, and 3T3 Transformation Assays.
Carcinogens: None present
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic
Additional Information:* Not tested to the highest dose or concentration. Subchronic Inhalation (Rats)/(-); Teratology/ (-); Biodegradation/not readily biodegradable

TLV: Not Published

PEL: Not Published

[1]XEL: 1 mg/m³ (Total Dust)

AR200844

[1]XEL - Xerox Exposure Limit (for Ocular toxicity)

Section IV - Physical Data

Appearance/Odor: Black powder / faint odor
Boiling Point: N.A.
Solubility in Water: Negligible
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. **% (Wgt.)** N.A. **% (Vol.)**

Softening Range: 85°C to 100°C
Melting Point: N.A.
Specific Gravity (H_2O = 1): ~1
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits **LEL:** N.A. **UEL:** N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is combustible powder. When dispersed in air, it forms explosive mixtures. By the U.S. Bureau of Mines format, the Explosion Severity = 3.5 and is considered "Strong". The Kst following NFPA #68 procedures is 236 bar-meters/sec.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Loose toner can be removed using a vacuum cleaner. Residue can be removed with soap and cold water. After removal of loose toner, garments may be washed or dry-cleaned.

Waste Disposal Method: Do not incinerate. No special techniques beyond normal practice. Insure conformity with federal, state, or local regulations.

AR200845

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A. **ID Number:** N. A.

XEROX

Material Safety Data Sheet

MSDS No.: 0401
Date: Mar. 18, 1983
Revision: Aug. 19, 1986

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: Formula A Cleaner

Part No. : 43P48, 43P49, 43P50, 43P51, included in Kits 8R1169 and 8R582

Chemical Name: None

Ingredients	CAS No.
Water (75-80%)	-----
Isopropanol (5-10%)	67-63-0
1-Butoxy - 2-Propanol (5-10%)	5131-66-8
Linear alcohol surfactant; C_{11}-C_{15} (<5%)	68131-40-8
Sodium Xylenesulfonate (<5%)	1300-72-7
Tetrapotassium Pyrophosphate (<1%)	7320-34-5

RECEIVED
OCT 14 1986
C. MURAWCZYK

Section II - Emergency and First Aid

Eyes: Flush thoroughly with water.
Skin: Wash thoroughly with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Central nervous system depression, cardiovascular and respiratory depression and gastrointestinal irritation.

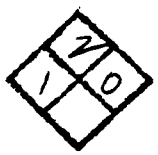
Additional Information: Call physician.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been tested and evaluated by Xerox Corporation. When used as intended, it does not represent a health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic
Dermal LD_{50}: >10.2 g/kg (Rabbits) practically non-toxic
Inhalation LC_{50}: >200 mg/l practically non-toxic
Eye Irritation: (Rabbits) mildly irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: None available
Mutagenicity: None available
Aquatic LC_{50}: None available

TLV: None established
PEL: None established



PPE B
UN 1142

AR200846

Additional Information: None

Section IV - Physical Data

Appearance/Odor: Clear liquid/slight odor
Boiling Point: 89-99°C
Solubility in Water: Completely
Evaporation Rate: 2.9, n-butylacetate = 1
Vapor Density (Air = 1): 2.07
Volatile 96.4% (Wgt.) - % (Vol.)

Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H_2O = 1): ~1
Vapor Pressure (mm Hg): 15 @ 20°C
pH = 9.6

Section V - Fire and Explosion Data

Flash Point (Method Used): 95°C (T.C.C.)

Flammable Limits *LEL: 2% UEL: 12%
*Value for Isopropanol at 760mm. and 82°C.

Extinguishing Media: Water, Foam, Dry Chemical, CO_2

Special Fire Fighting Procedures: Use water spray to cool containers.

Fire and Explosion Hazards: A moderate explosion hazard occurs when this material is exposed to heat or flames.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: None

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended on Xerox equipment.
Eye Protection: Wear safety glasses with side shields
Protective Gloves: Wear rubber or vinyl coated gloves.
Other: None required when used as intended on Xerox equipment.

Section VIII - Special Precautions

Handling and Storage: Do not store near heat, flames, or sparks.
This material is similar to soap and may be irritating to eyes.

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: No special disposal techniques. (Similar to washrom soaps.)

Waste Disposal Method: Flush down drain with water.

AR200847

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N.A. **ID Number:** N.A.

LABEL NO 18 1600 A

X·clude TIMED RELEASE PYRETHRUM

SHAKE WELL BEFORE USING

SPRAYS IN ANY POSITION

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION [illegible] Avoid contact with eyes [illegible] with water [illegible] Do not eat, drink or smoke while using [illegible] food preparation [illegible] Wash hands and food preparation [illegible] Food and feeding utensils should be covered [illegible] treatment. All [illegible] utensils should be covered before use. [illegible] Remove pets and [illegible] before using.

ENVIRONMENTAL HAZARDS. This pesticide [illegible] fish [illegible] Do not apply directly to lakes, streams and ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.

PHYSICAL OR CHEMICAL HAZARDS. Contents under pressure. Do not puncture or incinerate. Do not use or store near open flame. Exposure to temperatures above 130°F may cause bursting. Do not store above 130°F.

Do not spray where electrical short circuits might result such as [illegible] motors. Switches, [illegible] or any electronic equipment such as radios, television, computers, telephones, etc.

SPECIAL NOTICE: Do not use PT 1600A in greenhouses with unvented or defective gas heating systems or where open combustions exists.

ADDITIONAL WARNINGS. This product has demonstrated excellent plant safety, however all varieties of the plants listed have not been tested. When treating large numbers of plants of a single variety, spray a few plants and observe for phytotoxicity prior to full scale application.

Plants in bloom should not be treated since petal damage may occur.

SHAKE WELL BEFORE USING

DIRECTIONS FOR USE

[illegible] of Federal Law to use this product in a manner [illegible] with its labeling.

INDOORS, FLORISTS, GARDEN CENTERS, GREENHOUSES, HOBBY GREENHOUSES, HOMES, INTERIORSCAPES

For light infestations treat at five seconds per 100 square feet. For heavy infestations treat at ten seconds per 100 square feet. Coverage based on 5 foot high plants. Lower or higher dosage should be given based on height of foliage. Move can in a fast sweeping motion to provide maximum coverage maintaining a distance of 18 to 24 inches away from foliage.

Spot Treatment: For individual plants and localized infestations. Spray light mist on upper and lower leaf surfaces at a distance of 18-24 inches away from foliage. Avoid wetting foliage with spray. Repeat application as necessary.

OUTDOORS: LANDSCAPES, NURSERIES, ORNAMENTAL PLANTS, SHRUBS

For best results, spray when air is [illegible]. Use slow sweeping motion, holding the can 18-24 inches from plant. Avoid wetting foliage with spray. Spray mix at the rate of one foot per second. For heavy growth spray on both sides. Repeat when necessary.

FOR USE INDOORS AND OUTDOORS ON, BUT NOT LIMITED TO:

African Violets, Agapanthus, Ageratum, Aluminum Plant, Alyssum, Arrowhead, Aster, Azalea, Begonia, Birds Nest Fern, Blue Spruce, Boston Fern, Bottlebrush, Cactus, Calendula, Camelia, Carnations, Celosia, Jewel Box, Chrysanthemum, Cockscomb, Coleus, Cotoneaster, Crape Myrtle, Croton, Dahlia, Daisy, Dianthus, Dogwood, Dusty Miller, Dwarf Lilac, Escalonia, Eucalyptus, Flat Topped Sedum, Floss Flower, Friendship Plant, Gardenia, Gazania, Geranium, Golddust, Honeysuckle, Hydrangea, Ivy, Impatiens, Ivy, Jade Plant, Crassula, Japanese Aralia, Juniper, Leucothoe, Lilac, Malus, Marantia, Marigold, Mock Orange, Mugho Pine, Nandia, Oleander, Orchid, Ornamental Evergreens, Osmanthus, Pachysandra, Periwinkle, Petunia, Pittosporum, Juniper, Photinia, Pineapple Guava, Pittosporum, Podocarpus, Primrose, Privit, Pyracantha, Raphiolepsis, Rhododendron, Rose, Salvia, Sansevieria, Scarlet Sage, Snake Plant, Snapdragon, Sedum, Maple, Spider Plant, Star Jasmine, Strawflower, Swedish Ivy, Sweet Pea, Tahitian Bridal Veil, Velvet Plant (Gynura), Verbena, Vinca, Wandering Jew, Wax Plant, Zinnia

Do not use on: Cyclamen and Nasturtium

RESIDENTIAL-INDOOR PESTS

Cockroaches, Spiders, Silverfish, Crickets, Firebrats. Make spot treatment. Direct spray on floors, walls, under pipes, behind and on shelves and drawers. Spray directly on insects in these locations where possible. Repeat as necessary.

Ants. Spray into trails, nests and points of entry, around doors and storage areas. Spray directly on insects in these locations where possible.

Flying Insects—Flies, Moths, Gnats. [illegible] all windows and doors and direct focus toward ceiling. [illegible] 8 seconds per [illegible] feet. Disperse in all [illegible] rooms. Keep [illegible] for at least 15 minutes. Do not remain in treated area. Repeat application as necessary.

RESIDENTIAL-OUTDOOR PESTS

Flies. Spray outside surfaces of screens, doors, window frames or wherever these insects may enter the room. Also treat surfaces around light fixtures or porches in damages and other places where insects light or congregate. Repeat as necessary.

Ants, Crickets. For treatment of localized infestations of these insects in outdoor areas where there are weeds or brush, non crop areas, [illegible] thoroughly. For ants, treat thoroughly with trails and nests. Repeat applications as infestations warrant and as infestations occur.

STORAGE AND DISPOSAL:

STORAGE: Store in a cool dry place away from heat or open flame and inaccessible to children. Do not store below 32°F.

CONTAINER DISPOSAL. Do not reuse empty container. Do not puncture or incinerate. Replace cap and discard in trash.

PESTICIDE DISPOSAL: Securely wrap container in several layers of newspaper and discard in trash.

Whitmire Research Laboratories, Inc.
St. Louis, Missouri 63122

*Tradename pending

DO NOT USE ON OPEN BLOOMS

Whitmire

X·clude*

ENCAPSULATED NATURAL PYRETHRUM PT* 1600A

Timed Release Insecticide Greenhouse & Foliage Spray

FOR USE INDOOR AND OUTDOOR: Florists, Garden Centers, Greenhouses, Hobby Greenhouses, Homes, Interiorscapes, Landscapes and Nurseries

Kills and Repels: Ants, Aphids, Beetles (Aster Beetles, Blister Beetles, Cigarette Beetles, Colorado Potato Beetles, Cucumber Beetles, Drugstore Beetles, Flea Beetles, Japanese Beetles, Rose Chafers, Trogaderma, Watermelon Beetles, Weevils) Caterpillars (Cabbage Worms, Rose Slugs, Hornworms) Centipedes, Cockroaches, Crickets, Flies, Fungus Gnats, Gnats, House Flies, Leafhoppers, Mealy Bugs, Moths, Rose Aphids, Scales, Spider Mites, Spiders, Stable Flies, Stink Bugs, Tarnished Plant Bugs, and White Flies

May be used on. Potted and Flowering Plants, Foliage, Bedding Plants, Cut Flowers and Ornamentals

Active Ingredients:

Pyrethrins	
*Piperonyl Butoxide Technical	0.300%
N-Octyl Bicycloheptene Dicarboximide	2.200%
Petroleum Distillate	0.336%
Inert Ingredients	1.209%
	95.955%

*Equivalent to 1.76% (butylcarbityl) (6 Propylpiperonyl) Ether and 0.44% of related compounds

EPA Reg. No. 499-239 EPA Est. No. 499-MO-1

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES. Immediately flush eyes with plenty of water. Get medical attention if irritation persists.

IF SWALLOWED. Call a physician or Poison Control Center immediately. Drink one or two glasses of water and induce vomiting by touching the back of the throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

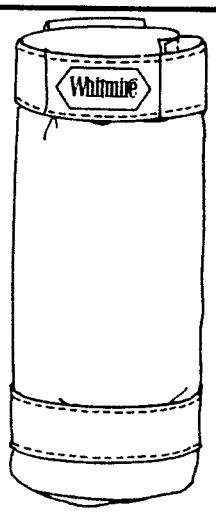
IF ON SKIN. Remove contaminated clothing and wash affected areas with soap and water.

IF INHALED. Remove patient to fresh air. Apply artificial respiration if indicated.

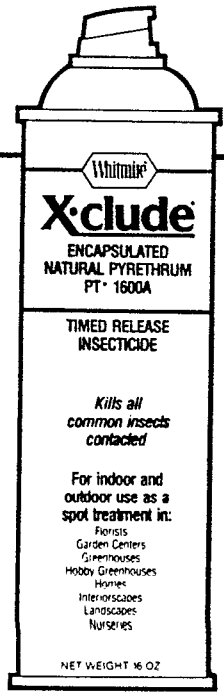
See side panel for additional precautionary statements.

NET WEIGHT: 16 OZ.

Convenient 16 oz. size... Call:



Handy Carrying Pouch Available



AR200848

To Receive Our Pest Management Bulletins or for Technical Assistance contact Whitmire Research Labs at 3568 Tree Court — St. Louis, Mo. 63122 — 800-325-3668 — In Missouri (314) 225-5371

860502F1

1.2 B 1993

2C FIM Zimmerman, Ave.

NOTICE: JUDGEMENT BASED ON INDIRECT TEST DATA.

AEROSOL MATERIAL SAFETY DATA SHEET

(ESSENTIALLY SIMILAR TO FORM OSHA-20)

ORIGINAL (Red)

Chemi-cap

EMERGENCY PHONE (305) 974-5440

[redacted]

CHEMICAL PACKAGING CORPORATION
P.O. BOX 9947, FT. LAUDERDALE, FL 33310

SWAT C95 Wasp & Hornet Spray 7347

QUICK PRODUCT IDENTIFIER (IN PLANT COMMON NAME)

I — IDENTIFICATION

SIGNATURE OF PERSON RESPONSIBLE FOR PREPARATION: W. Smith

DATE PREPARED: 11/25/85

PACKAGE TYPE: Aerosol Container

FORMULA: Proprietary Mixture

TRADE NAME: SWAT Wasp & Hornet Spray

II — HAZARDOUS INGREDIENTS

PRINCIPLE HAZARDOUS COMPONENT(s) (CHEMICAL NAME(S))	CAS#	APPROX. %(wt)	TLV (ppm)
+(5-Benzyl-3-furyl) methyl 2,2-dimethyl-3 (2-methylpropenyl) cyclopropanecarboxylate	10453-86-8	.150	
Related compounds		.020	
Aromatic petroleum hydrocarbons		.274	
Petroleum distillate	64742-88-7	1.556	85
1,1,1-Trichloroethane	71-55-6		350
THIS PRODUCT CONTAINS NO KNOWN OR SUSPECTED CARCINOGENS.			
PROPELLANT: Carbon dioxide	124-38-9		

III — PHYSICAL DATA

BOILING POINT (°F) OF CONCENTRATE	ND	SPECIFIC GRAVITY (H_2O = 1) @75°F OF CONCENTRATE	1.164
VAPOR PRESSURE (psig) IN CAN @ 75°F	90	% VOLATILE BY VOLUME IN CAN	85
VAPOR DENSITY	ND	FLASH POINT OF CONCENTRATE	None up to 150°F Tag open cup
SOLUBILITY IN WATER OF CONCENTRATE	Slight	APPEARANCE AND ODOR OF SPRAY	Colorless to light yellow liquid with typical odor

IV — FIRE & EXPLOSION HAZARD DATA

FLAMMABILITY as per CPSC FLAME EXTENSION TEST: Spray non-flammable

FLAMMABLE LIMITS: Lower N/A; Upper N/A

EXTINGUISHING MEDIA: Foam, Dry chemical, CO_2

SPECIAL FIRE FIGHTING PROCEDURES

KEEP CONTAINERS COOL. USE EQUIPMENT OR SHIELDING REQUIRED TO PROTECT PERSONNEL AGAINST BURSTING, RUPTURING OR VENTING CONTAINERS.

UNUSUAL FIRE & EXPLOSION HAZARDS

AT ELEVATED TEMPERATURES (ABOVE 120°F) CONTAINERS MAY VENT, RUPTURE OR BURST.

RECEIVED APR 0 9 1987 C. MURAWCZYK

V — REACTIVITY DATA

CHEMICAL STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	XX	Do not expose to temp. above 120°F

INCOMPATABILITY (Materials to avoid): Strong alkalies, oxidizers, aluminum and other reactive metals

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, phosgene (small amounts)

AR200849

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	XX	None

AEROSOL PRODUCTS PRESENT A LIMITED HAZARD DURING STORAGE OR USE IF LABEL PRECAUTIONS ARE FOLLOWED. INTENTIONAL MIS-USE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS CAN BE HARMFUL, OR FATAL. PRESSURIZED CONTAINERS MUST NOT BE EXPOSED TO TEMPERATURES ABOVE 120°F AND SPRAY SHOULD NOT BE DIRECTED TOWARD FACE OR EYES, OPEN FLAME OR OTHER SOURCE OF IGNITION.

VI— HEALTH HAZARD DATA

OSHA PERMISSIBLE EXPOSURE LIMIT	THRESHOLD LIMIT VALUE
N.D.	See Section II

EFFECTS OF OVER EXPOSURE

INHALATION:

Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headaches and possible unconsciousness.

SKIN CONTACT/ABSORPTION:

Prolonged or repeated contact can cause moderate irritation, defatting and dermatitis.

INGESTION:

Can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis.

EYES:

Can cause severe irritation, redness, tearing and blurred vision.

EMERGENCY AND FIRST AID PROCEDURES

EYES AND SKIN Flush with water, lifting upper and lower lids. Get medical attention. Wash exposed area with soap and water.

INHALATION Remove to fresh air. If breathing difficult, administer oxygen. If breathing has stopped give artificial respiration. Get medical attention.

INGESTION Do not induce vomiting. Get medical attention. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis.

VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE CONTAINER IS PUNCTURED AND MATERIAL IS RELEASED.

Clean up area by mopping or with absorbent materials and place in closed containers for disposal. Consult Federal, State or Local disposal authorities for approved disposal procedures.

WASTE DISPOSAL METHOD

WHEN USED PROPERLY AEROSOL PRODUCTS DO NOT GENERATE HAZARDOUS WASTE. EMPTY DE-PRESSURIZED CONTAINERS CAN NOT BE REUSED AND SHOULD BE WRAPPED AND PUT IN TRASH COLLECTION. CANS WHICH ARE PRESSURIZED OR CONTAIN LIQUID MUST BE DISPOSED OF IN A PERMITTED WASTE MANAGEMENT FACILITY. CONSULT FEDERAL, STATE AND LOCAL DISPOSAL AUTHORITIES FOR APPROVED PROCEDURES.

VIII — SPECIAL PROTECTION INFORMATION

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY General ventilation adequate.

EYE Chemical splash goggles in compliance with OSHA regulations.

SKIN Wear resistant gloves such as: neoprene, nitrile rubber or polyvinyl chloride.

OTHER Do not eat, drink or smoke in work area, wash hands before eating.

VENTILATION REQUIREMENTS Provide sufficient mechanical (general) and/or local exhaust ventilation to maintain exposure below TLV (S)

IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Do not store at temperatures above 120 F.

SPECIAL PRECAUTIONARY STATEMENTS

AR200850

PLEASE READ AND FOLLOW THE DIRECTIONS ON THE PRODUCT LABEL; THEY ARE YOUR BEST GUIDE TO USING THIS PRODUCT IN THE MOST EFFECTIVE WAY, AND GIVE THE NECESSARY SAFETY PRECAUTIONS TO PROTECT YOUR HEALTH.

NOTICE: WE BELIEVE THAT THE INFORMATION CONTAINED ON THIS MATERIAL SAFETY DATA SHEET IS ACCURATE. THE SUGGESTED PROCEDURES ARE BASED ON EXPERIENCE AS OF THE DATE OF PUBLICATION. THEY ARE NOT NECESSARILY ALL-INCLUSIVE NOR FULLY ADEQUATE IN EVERY CIRCUMSTANCE. ALSO, THE SUGGESTIONS SHOULD NOT BE CONFUSED WITH NOR FOLLOWED IN VIOLATION OF APPLICABLE LAWS, REGULATIONS, RULES OR INSURANCE REQUIREMENTS.
NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE IS MADE.

MATERIAL SAFETY DATA SHEET

Drain Opener
Zimmerman, Inc.

MSDS NUMBER: M4806

MSDS DATE: 05-15-86

PRODUCT NAME: **50% CAUSTIC SODA-DB**

Diamond Shamrock Chemicals Company

Z's INDUSTRIAL DRAIN OPENER

[redacted]

24 HOUR EMERGENCY PHONE: (214) 922-2700

I. PRODUCT IDENTIFICATION

3 HEALTH HAZARD, 0 FIRE HAZARD, & 1 REACTIVITY rating based on NIOSH "Identification System for Occupationally Hazardous Materials" (1974)

MANUFACTURER'S NAME AND ADDRESS: Diamond Shamrock Chemicals Company, Chlor-Alkali Division, 351 Phelps Court, P.O. Box 152300, Irving, Texas 75015-2300

CHEMICAL NAME: Sodium Hydroxide CAS NUMBER: 1310-73-2

SYNONYMS/COMMON NAMES: Sodium Hydroxide; NaOH

CHEMICAL FORMULA: NaOH

DOT PROPER SHIPPING NAME: Caustic Soda, Liquid

DOT HAZARD CLASS: Corrosive Material

DOT I.D. NUMBER: UN1824 HAZARDOUS SUBSTANCE: RQ1000

2 0

PPE C

UN 1824

II. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	HAZARD DATA	CAS NUMBER	%
Sodium Hydroxide	PEL = 2 mg/m^3 TLV = 2 mg/m^3 Ceiling	1310-73-2	50
Water		7732-18-5	50

See Section V

This material is listed in the TSCA Inventory.
Not listed as carcinogenic by IARC, NTP, OSHA, ACGIH.

III. PHYSICAL DATA

BOILING POINT @ 760 mm Hg: 143°C VAPOR DENSITY (Air=1): N/A

FREEZING POINT: 12.1°C (54°F) % VOLATILES BY VOL.: <50%

VAPOR PRESSURE: 13 mm Hg @ 60°C

SPECIFIC GRAVITY (H_2O=1): 1.54 @ 15.6°C

SOLUBILITY IN H_2O % BY WT: Completely Soluble

APPEARANCE AND ODOR: Clear with no odor

pH: 7.5% solution has pH 14.0

RECEIVED

C. MURAWCZYK

CAS = Chemical Abstract Service Number
PEL = OSHA Permissible Exposure Limit
TLV = TLV®, ACGIH Threshold Limit Value, Current

N/A = No relevant information found or not available
NA = Not applicable

Diamond Shamrock Chemicals Company - A subsidiary of Diamond Shamrock Corporation

AR200851

This Material Safety Data Sheet was prepared in accordance with 29 CFR 1910.1200. All information, recommendations and suggestions appearing herein concerning our product are based upon tests and data believed to be reliable, however, it is the user's responsibility to determine the safety, toxicity and suitability for his own use of the product described herein. Since the actual use by others is beyond our control, no guarantee expressed or implied is made by Diamond Shamrock as to the effects of such use the results to be obtained or the safety and toxicity of the product nor does Diamond Shamrock assume any liability arising out of use by others of the product referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.

IV. FIRE AND EXPLOSION DATA

FLASH POINT: NA AUTOIGNITION TEMPERATURE: Nonflammable

FLAMMABLE LIMITS IN AIR, % BY VOLUME- UPPER: Nonflammable
LOWER: Nonflammable

EXTINGUISHING MEDIA.
This product is not combustible. Water spray, foam, carbon dioxide or dry chemicals may be used where this product is stored.

SPECIAL FIRE FIGHTING PROCEDURES:
Protective clothing and pressure-demand, self-contained breathing apparatus should be worn by firefighters in areas where product is stored.

UNUSUAL FIRE AND EXPLOSION HAZARD:
None. See Reactivity (Section VI).

V. HEALTH HAZARD INFORMATION

HEALTH HAZARD DATA:
Caustic Soda is a corrosive material.
Sodium Hydroxide: Acute Oral LD_{50} = 140-340 mg/kg (rat)
Acute Dermal LD_{50} = 1.35 gm/kg (rabbit)

ROUTES OF EXPOSURE

INHALATION:
Airborne concentrations of dust, mist, or spray of caustic soda may cause damage to the upper respiratory tract and even to the lung tissue proper which could produce chemical pneumonia, depending upon severity of exposure.

SKIN CONTACT:
This product is destructive to tissues contacted and produces severe burns.

SKIN ABSORPTION:
See Skin Contact above.

EYE CONTACT:
This product is destructive to eye tissues on contact. Will cause severe burns that result in damage to the eyes and even blindness.

INGESTION:
This product, if swallowed, can cause severe burns and complete tissue perforation of mucous membranes of the mouth, throat, esophagus and stomach.

EFFECTS OF OVEREXPOSURE

ACUTE:
Corrosive to all body tissues with which it comes in contact.

CHRONIC:
The chronic local effect may consist of multiple areas of superficial destruction of the skin or of primary irritant dermatitis. Similarly, inhalation of dust, spray, or mist may result in varying degrees of irritation or damage to the respiratory tract tissues and an increased susceptibility to respiratory illness.

EMERGENCY AND FIRST AID PROCEDURES

EYES:
OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY THEN SEEK MEDICAL ATTENTION. IMMEDIATELY flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. Seek medical attention immediately.

6R20352

SKIN:
Wash contaminated areas with plenty of water for 15 minutes. Remove contaminated clothing and footwear and wash clothing before reuse. Discard footwear which cannot be decontaminated. Seek medical attention immediately.

V. HEALTH HAZARD INFORMATION ...continued

INHALATION:
Get person out of contaminated area to fresh air. If breathing has stopped, resuscitate and administer oxygen if readily available. Seek medical attention immediately.

INGESTION:
NEVER give anything by mouth to an unconscious person. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. If available, give several glasses of milk. If vomiting occurs spontaneously, keep airway clear. Seek medical attention immediately.

VI. REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY:
Under normal conditions, this material is stable.

INCOMPATIBILITY:
See Mixing and Handling (Section IX). Avoid direct contact with water. This product may be added slowly to water or acids with dilution and agitation to avoid a violent reaction. When handling this product, avoid contact with aluminum, tin, zinc, and alloys containing these metals. Do not mix with strong acids without dilution and agitation to prevent violent or explosive reaction. Avoid contact with leather or wool.

HAZARDOUS DECOMPOSITION PRODUCTS:
None.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:
Material is not known to polymerize.

VII. ENVIRONMENTAL PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Leaks should be stopped. Spills should be contained and cleaned up immediately. Spills should be removed by using a vacuum truck. Neutralize remaining traces of material with any dilute inorganic acid such as hydrochloric, sulfuric, nitric, phosphoric, and acetic acid. The spill area should then be flushed with water followed by liberal covering of sodium bicarbonate. All clean-up material should be removed and placed in approved containers, labeled and stored in a safe place to await proper treatment or disposal. Spills on areas other than pavement, e.g., dirt or sand, may be handled by removing the affected soils and placing in approved containers. Persons performing clean-up work should wear adequate personal protective equipment and clothing.

Caution: Caustic Soda may react violently with acids and water.

WASTE DISPOSAL METHOD:
The materials resulting from clean-up operations may be hazardous wastes and, therefore, subject to specific regulations. Package, store, transport, and dispose of all clean-up materials and any contaminated equipment in accordance with all applicable federal, state, and local health and environmental regulations. Shipments of waste materials may be subject to manifesting requirements per applicable regulations. Appropriate disposal will depend on the nature of each waste material and should be performed by competent and properly permitted contractors. Ensure that all responsible federal, state, and local agencies receive proper notification of spill and disposal methods.

VIII. INDUSTRIAL HYGIENE CONTROL MEASURES

VENTILATION REQUIREMENTS:
Use adequate local exhaust ventilation where mist, sprays or resuspended dust may be generated. NOTE: Where carbon monoxide or other reaction products may be generated, special ventilation may be required.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY:
Respiration protection is not required under normal use. Use NIOSH/MSHA approved respirator where mists, sprays or resuspended dust may be generated. Follow manufacturer's recommendations.

EYE:
Face shield and goggles or chemical goggles should be worn.

GLOVES:
Gloves should be worn. Gloves may be decontaminated by washing with mild soap and water. Natural and butyl rubber have been suggested.

OTHER CLOTHING AND EQUIPMENT:
Protective clothing to minimize skin contact. Chemically resistant safety shoes. Wash contaminated clothing with soap and water and dry before reuse. Showers and eyewash facilities should be accessible.

MONITORING EXPOSURE

BIOLOGICAL:
N/A

ORIGINAL (Red)

PERSONAL/AREA:
Use NIOSH Analytical Method No. 7401.

IX. SPECIAL PRECAUTIONS

SIGNAL WORD: DANGER!

STATEMENT OF HAZARDS:
CAUSES SEVERE BURNS TO SKIN AND EYES
CONTACT WITH EYES CAN CAUSE PERMANENT EYE DAMAGE
INHALATION OF DUST, MIST OR SPRAY CAN CAUSE SEVERE LUNG DAMAGE
CAN REACT VIOLENTLY WITH WATER, ACIDS AND OTHER SUBSTANCES

PRECAUTIONARY STATEMENTS:
Do not get into eyes, on skin, on clothing.
Avoid breathing dust, mists, or spray.
Do not take internally.
Use with adequate ventilation and employ respiratory protection when exposure to dust, mist or spray is possible.
When handling, wear chemical splash goggles, face shield, rubber gloves and protective clothing.
Wash thoroughly after handling or contact - exposure can cause burns which are not immediately painful or visible.
Keep container closed.
Product can react violently with water, acids, and other substances - read Special Mixing and Handling Instructions below carefully before using.
Product is corrosive to tin, aluminum, zinc and alloys containing these metals, and will react violently with these metals in powder form.
Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed spaces and can cause death. Follow appropriate tank entry procedures (ANSI Z117.1-1977).

IX. SPECIAL PRECAUTIONS ...continued

ORIGINAL (Red)

FIRST AID:

IN CASE OF CONTACT:

For eyes:

Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire eye surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. Seek medical attention immediately.

For skin:

Immediately wash with plenty of water for 15 minutes. Remove contaminated clothing and footwear. Wash clothing before reuse and discard footwear which cannot be decontaminated. Seek medical attention immediately.

IF INHALED:

Remove person out of contaminated area to fresh air. If breathing has stopped, artificial respiration should be started. Oxygen may be administered, if available. Seek medical attention immediately.

IF SWALLOWED:

Do not induce vomiting. Give large quantities of water. If available, give several glasses of milk. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

IN CASE OF SPILL OR LEAK:

Leaks should be stopped. Spills, after containment, should be shoveled up or removed by vacuum truck (if liquid) to chemical waste area. Neutralize residue with dilute acid, flush spill area with water followed by liberal covering of sodium bicarbonate. Dispose of wash water and spill by-products according to federal, state, and local regulations.

SPECIAL MIXING AND HANDLING INSTRUCTIONS:

Considerable heat is generated when product is mixed with water. Therefore, when making solutions always carefully follow these steps:

ALWAYS wear ALL protective clothing described above. Never add water to product. ALWAYS add product - with constant stirring - slowly to surface of lukewarm (80-100°F) water, to assure product is being completely dissolved as it is added.

If product is added too rapidly, or without stirring, and becomes concentrated at bottom of mixing vessel, excessive heat may be generated, resulting in DANGEROUS boiling and spattering, and a possible IMMEDIATE AND VIOLENT ERUPTION of highly caustic solution.

Note: 50 pounds of product dissolved in 30 gallons of 90°F water will raise temperature of resulting solution to approximately 180°F. Never add more product than can be absorbed by solution while maintaining temperature below 200°F (@ sea level) to prevent boiling and spattering.

Product can react EXPLOSIVELY with acids, aldehydes, and many other organic chemicals - when mixing product with solutions containing such chemicals, follow all of above mixing instructions, and add product very gradually, while stirring constantly.

ALWAYS empty and clean containers of all residues before adding product, to avoid possible EXPLOSIVE reaction between product and unknown residue.

Returnable containers should be shipped in accordance with supplier's recommendations. Return shipments should comply with all federal, state, and DOT regulations. All residual caustic soda should be removed from containers prior to disposal.

More information on the hazards and handling of caustic soda appear in Diamond Shamrock Corporation's Material Safety Data Sheet and Caustic Soda Handbook EC-LDC-1d.

DISPOSAL:

The materials resulting from clean-up operations may be hazardous wastes and, therefore, subject to specific regulations. Package, store, transport, and dispose of all clean-up materials and any contaminated equipment in accordance with all applicable federal, state, and local health environmental regulations. Shipments of waste materials may be subject to manifesting requirements per applicable regulations. Appropriate disposal will depend on the nature of each waste material and should be performed by competent and properly permitted contractors. Ensure that all responsible federal, state, and local agencies receive proper notification of disposal.

AR200855

MATERIAL SAFETY DATA SHEET

PRODUCT NAME Zinc-It (Aerosol) #2018	# MSDS002081 PPE B
MANUFACTURED BY: CRC CHEMICALS	Phone (215) 674-4300 UN 1950
885 LOUIS DRIVE, WARMINSTER, PA. 18974	

1. INGREDIENTS

	CAS #	ACGIH TLV	OSHA PEL	Other Limits	%
Zinc Dust	7440-66-6	NA	NA		27.5
Epoxy Ester Resin	NA	NA			2.5
Xylene	1330-20-7	100	100		7.5
Toluene	108-88-3	100	200		4.0
Methylene Chloride	75-09-2	100	500		32.0
Methyl Ethyl Ketone	78-93-3	200	200		6.5
*Isobutane	75-28-5	NA		800	10
*Propane	74-98-6	NA	1000		10

ORIGINAL (Red)

*The isobutane and propane function as a propellent for this product.

2. PHYSICAL DATA (Without propellent)

Specific Gravity 1.522	Vapor Pressure NA	% Volatile 70
Boiling Point 104°F Initial	Evaporation Rate Dries in 20-30 minutes	
Freezing Point NA	Vapor Density Heavier than air	

Appearance and Odor Gray, viscous liquid - solvent odor

Solubility Soluble in most organic solvents

3. FIRE AND EXPLOSION DATA

Flashpoint <20°F	Method TCC	Flammable Limits NA
Extinguishing Media CO_2, Foam, Dry Chemical		LEL / UEL

Unusual Hazards Material reacts with water - Aerosol cans may explode if heated above 130°F.

4. REACTIVITY AND STABILITY

Stability Stable

Hazardous decomposition products Thermal (Hydrogen chloride, chlorine, possible phosgene)

Materials to avoid Water, acids, strong acids

5. PROTECTION INFORMATION

Ventilation Mechanical required if sprayed in a confined area.

Respiratory Self contained breathing apparatus if vapors exceed TLV.

Gloves Solvent resistant | Eye & Face Safety goggles.

Other Protective Equipment Usually not required for aerosol use.

AR200856

ORIGINAL (Red)

6. HEALTH HAZARD DATA

Primary Routes of Entry Inhalation and Skin

Signs and Symptoms of Exposure

1 Acute Overexposure Inhalation - Headaches, dizziness, nausea and anesthesia. Eyes - Will cause eye irritation. Skin - Will cause drying and irritation of skin.

2. Chronic Overexposure May cause contact dermititus - Could have effect on liver and kidney.

Medical Conditions Generally Aggravated by Exposure Breathing difficulties

Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Program	Yes ☐ No ☒	IARC Monographs	Yes ☐ No ☒	OSHA	Yes ☐ No ☒

Emergency and First Aid Procedures (If symptoms persist, call a doctor)

1. Inhalation Remove to fresh air - apply artificial respiration if necessary.
2. Eyes Flush with water for at least 15 minutes.
3. Skin Wash with soap and water - Use skin cream.
4. Ingestion Do not induce vomiting - Call a physician.

7. SPILL OR LEAK PROCEDURES

Precautions to be taken in Handling and Storage Store in a cool dry place.

Steps to be taken in case Materials is released or spilled Not normally a problem with aerosols - Ventilate and absorb liquid - Remove sources of ignition.

Waste Disposal Partially used or filled aerosols are Hazardous Waste if discarded - Dispose of in conformance to Federal, State & Local regulations.

8. SPECIAL PRECAUTIONS AND USE DIRECTIONS

Aerosol containers may explode if exposed to temperatures in excess of 130°F. Due to the high density of the metallic zinc, the aerosol must be thoroughly agitated before use.

AR200857

PREPARED BY: A. P. Reed

ORIGINAL DATE OR DATE OF REVISION Nov. 1985

Products Company, Inc.

RECEIVED

SEP 2 0 1986

C. MURAWCZYK

ORIGINAL (Red)

GENERAL INFORMATION

MATERIAL SAFETY DATA SHEET

INFORMATION TO BE PROVIDED [1] [2]

1) The identity that is used on the container label;
2) The chemical and common name of all ingredients having known health hazards present in concentrations greater than 1%, and for carcinogens, if present at 0.1% or more;
3) The physical and chemical characteristics of the hazardous components;
4) The physical and health hazards including signs and symptoms of exposure and prior and/or existing contraindicating medical conditions;
5) The primary routes of entry;
6) Any known exposure limits (OSHA PELs or ACGIH TLVs);
7) Whether the hazardous chemical is listed in the NTP *Annual Report on Carcinogens* or is a potential carcinogen according to IARC or OSHA;
8) The precautions for safe handling and use, and procedures for spill/leak cleanup;
9) Control measures;
10) The emergency first aid procedures;
11) The date of preparation; and
12) The name, address, and telephone number of the company or the responsible employee distributing the MSDS.

TRADE SECRETS (Also see Section i — Federal Register Vol. 48 No. 228 Nov. 25, 1983 Rules & Regulations)

OSHA has given special consideration to chemical information that the chemical manufacturer or distributor considers to be a trade secret [29 CFR 1910.1200(i)]. Products for which trade secrecy has been claimed must be accompanied by a material safety data sheet. The manufacturer also must specify on the MSDS that the chemical's identity is a trade secret.

In certain circumstances the user may need to know the specific chemical identity of the substance in order to protect the health of its workers. The OSHA procedures for obtaining this information are designed to balance the need-to-know for health protection with the economic value of maintaining the trade secret. If adequate health protection can be achieved only by knowledge of a chemical name, then procedures can be implemented to release the name. In no case can the chemical manufacturer or distributor be forced to disclose a trade secret revealing the chemical process or the percentage composition of the product.

When the specific name of a chemical is desired for protection of worker health in a non-emergency circumstance, such as the desire to monitor the worker or the workplace for specific chemicals, the health officer must request in writing the chemical name and state the specific reasons as to why the information on the material safety data sheet is not sufficient. Proof must be provided that the chemical identity is needed. Finally, a statement guaranteeing confidentiality is necessary but no penalty bond need be posted.

After receipt of this request, the chemical manufacturer has 30 days in which to reply. If the manufacturer still wishes to claim confidentiality, it must prove that the chemical identity is indeed an important trade secret. If the parties cannot reach an agreement, OSHA will arbitrate.

If an emergency, the procedures for obtaining the chemical name are different than in a non-emergency. A health officer (e.g., a physician or industrial hygienist) for the employer may contact the chemical manufacturer and be told the name of the specific chemical. The chemical manufacturer may not withhold the information requested at the time of the emergency, although the manufacturer may request a follow-up written statement of need and a promise of confidentiality.

AR200858

(1) American Chemical Society, Copyright April 1985.
(2) See Trade Secret Section for Exclusions

KONICA ROYAL COPIERS

PPE A

UN 714

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

ORIGINAL (Rcd)

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME: KONISHIROKU PHOTO INDUSTRIES, CO., LTD.	EMERGENCY TELEPHONE NO.: 0426-42-0161
ADDRESS (Number, Street, City, State, and ZIP Code): 2970 Ishikawa-cho, Hachioji-shi, Tokyo, 192, Japan	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS: 3302 Toner, 973-712
CHEMICAL FAMILY	FORMULA

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE	n.a.		METALLIC COATINGS	n.a.	
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
n.a.		

RECEIVED

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	n.a.	SPECIFIC GRAVITY (H_2O=1)	1.1
VAPOR PRESSURE (mm Hg.)	n.a.	PERCENT, VOLATILE BY VOLUME (%)	n.a.
VAPOR DENSITY (AIR=1)	n.a.	EVAPORATION RATE (_____ =1)	n.a.
SOLUBILITY IN WATER	Negligible		

APPEARANCE AND ODOR Black powder and odorless

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	n.a.	FLAMMABLE LIMITS	Lel	Uel

EXTINGUISHING MEDIA
Water, dry chemical and carbon dioxide

SPECIAL FIRE FIGHTING PROCEDURES
None.

AR200859

UNUSUAL FIRE AND EXPLOSION HAZARDS
None and non-explosive

(Continued on reverse side)

Form OSHA-20
Rev. May 72

SECTION V - HEALTH HAZARD DATA

ORIGINAL (Red)

THRESHOLD LIMIT VALUE	n.a.
EFFECTS OF OVEREXPOSURE	Usual discomfort of inhalation in heavy dust conditions.
EMERGENCY AND FIRST AID PROCEDURES	None specific, normal washing with soap and water.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	XX	
INCOMPATABILITY *(Materials to avoid)*	None.		
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon monoxide and carbon dioxide when thermal decomposing		
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Can be handled as dry powder; wipe-out or vacuum clean.

WASTE DISPOSAL METHOD

Deposit in sanitary landfill in accordance with local, state and federal regulations

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*	None in normal handling			
VENTILATION	LOCAL EXHAUST	Unnecessary	SPECIAL	None.
	MECHANICAL *(General)*	Unnecessary	OTHER	None.
PROTECTIVE GLOVES	Unnecessary	EYE PROTECTION	Unnecessary	
OTHER PROTECTIVE EQUIPMENT	None.			

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	None.
OTHER PRECAUTIONS	None.

AR200860

MATERIAL SAFETY DATA SHEET

Consumer Products Division, Division of Borden, Inc.
180 EAST BROAD STREET, COLUMBUS, OHIO 43215

Emergency Telephone
(614) 431-6600
(OPERATION ALERT)

ORIGINAL (Red)

THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200 REQUIRES THAT THE INFORMATION CONTAINED ON THIS SHEET BE MADE AVAILABLE TO YOUR WORKERS.

INSTRUCT YOUR WORKERS TO HANDLE THIS PRODUCT PROPERLY

PPE B
UN 1950

NAME: **KRYLON 1351 ELECTRONIC CONTACT CLEAN/LUB**
TYPE: **AEROSOL SPRAY** **25-Nov-85**
APPLICATION: **ELECTRONIC CONTACT CLEANER WITH RELUBRICANT**

SIGNAL WORD—DANGER!

THIS MATERIAL IS A "HEALTH HAZARD" AND/OR A "PHYSICAL HAZARD" AS DETERMINED WHEN REVIEWED ACCORDING TO THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION 29 CFR PART 1910.1200 "HAZARD COMMUNICATION" STANDARD.

CHEMICAL HAZARD RATING

HEALTH=2(MODERATE)
FIRE=4(EXTREME)
REACTIVITY=0(LEAST)

29CFR1910.1200 HAZARDOUS INGREDIENTS/REPORTED HEALTH EFFECTS

CAS REGISTRY NO.	MATERIAL DESCRIPTION	% BY WT.
74-98-6	PROPANE	12.

THIS MATERIAL IS A SIMPLE ASPHYXIANT. SIGNS AND SYMPTOMS OF OVEREXPOSURE INCLUDE CYANOSIS, RESPIRATORY DISTRESS, HEADACHE, DIZZINESS, DROWSINESS, UNCONSCIOUSNESS AND ASPHYXIATION.

CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.

ACGIH EXPOSURE LIMIT: SEE ACGIH TLVS, APPENDIX E

OSHA 29CFR1910 EXPOSURE LIMIT: 1000 PPM, 8-HR TWA

75-28-5	ISOBUTANE	16.

110-54-3	HEXANE	22.

CHRONIC EXPOSURES HAVE CAUSED PERIPHERAL NEUROPATHY.

CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, AND DROWSINESS.

ACGIH EXPOSURE LIMIT: 50 PPM, 8-HR TWA

OSHA 29CFR1910 EXPOSURE LIMIT: 500 PPM, 8-HR TWA

NIOSH DOCUMENT NUMBER: 77-151

142-82-5	HEPTANE	49.

CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, UNCONSCIOUSNESS AND EVEN ASPHYXIATION.

ACGIH EXPOSURE LIMIT: 400 PPM, 8-HR TWA

OSHA 29CFR1910 EXPOSURE LIMIT: 500 PPM, 8-HR TWA

NIOSH DOCUMENT NUMBER: 77-151

PHYSICAL DATA

VAPOR PRESSURE — SEE CAN PRESSURE
VAPOR DENSITY HEAVIER THAN AIR
SOLUBILITY IN WATER — SLIGHT
SPECIFIC GRAVITY LIGHTER THAN WATER
EVAP RATE FASTER THAN BUTYL ACETATE
BOILING POINT; APPEARANCE; ODOR—N.A.
PERCENT VOLATILE BY WEIGHT: 99
PERCENT NON-VOLATILE BY WEIGHT: 1
PRESSURE IN CONTAINER, PSIG @ 70 F. APPROX. 50

RECEIVED
MAY 19 1987
C. MURAWCZYK

ACUTE HEALTH HAZARD DATA

SKIN ABSORPTION: NO HAZARDS KNOWN TO BORDEN.

INGESTION: MAY BE HARMFUL IF SWALLOWED.

INHALATION: MAY BE HARMFUL IF INHALED. LIQUID OR VAPOR CAN CAUSE IRRITATION OF NOSE, THROAT AND LUNGS.

SKIN: CAUSES IRRITATION.

EYES: CAUSES IRRITATION.

HANDLING PRECAUTIONS

INHALATION: AVOID BREATHING VAPOR OR MIST.

USE WITH ADEQUATE VENTILATION.

SKIN: AVOID CONTACT WITH SKIN.

EYES: AVOID CONTACT WITH EYES.

WASH THOROUGHLY AFTER HANDLING.

EMERGENCY AND FIRST AID PROCEDURES

INTERNAL: IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.

INHALATION: REMOVE TO FRESH AIR.

SKIN CONTACT: FLUSH SKIN WITH WATER. IF IRRITATION PERSISTS, CALL A PHYSICIAN.

EYE CONTACT: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN.

FIRE AND EXPLOSION HAZARD DATA

EXTREMELY FLAMMABLE.

CONTENTS UNDER PRESSURE; EXPOSURE TO HIGH TEMPERATURE MAY CAUSE BURSTING. AVOID RADIATORS, STOVES, DIRECT SUNLIGHT, OR OTHER HEAT SOURCE.

DO NOT PUNCTURE OR INCINERATE CONTAINER.

DO NOT SPRAY NEAR OPEN FLAME.

REACTIVITY DATA

NORMALLY STABLE AS DEFINED IN NFPA 704-12(4-3.1).

MAJOR DECOMPOSITON PRODUCTS: CO, CO_2

SPECIAL PROTECTION INFORMATION

APPROVED RESPIRATORY PROTECTION REQUIRED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL.

USE GOGGLES OR FACE SHIELD IF SPLASHING IS LIKELY.

WEAR IMPERVIOUS GLOVES AS REQUIRED TO PREVENT SKIN CONTACT.

WEARING SAFETY GLASSES, SAFETY SHOES, HARD HATS AND SUITABLE CLOTHING IS STANDARD PRACTICE IN MANY INDUSTRIAL OPERATIONS.

SPILL OR LEAK PROCEDURES

ELIMINIATE ALL IGNITION SOURCES.

SOAK UP WITH ABSORBENT MATERIAL AND REMOVE TO A CHEMICAL DISPOSAL AREA.

PREVENT ENTRY INTO NATURAL BODIES OF WATER.

SEE REVERSE SIDE

AR200661

WASTE DISPOSAL METHOD

DISPOSE OF ACCORDING TO LOCAL, STATE, AND FEDERAL REQUIREMENTS.

EMPTY CONTAINER: MAY CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEARBY. INCINERATION WILL CAUSE CONTAINER TO BURST VIOLENTLY.

STORAGE PRECAUTIONS

DO NOT STORE AT TEMPERATURES OVER 120 F

DOT CLASSIFICATION

ORM-D CONSUMER COMMODITY

NOR (M) KD-1351 11/25/85

DISCLAIMER

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY BORDEN, except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States patent. The information provided herein was believed by Borden to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no-claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

ORIGINAL (Red) ORIGINAL (Red)

Armstrong

MATERIAL SAFETY DATA SHEET

RECEIVED
SEP 2 6 1986
C. MURAWCZYK

Armstrong World Industries, Inc.
Human Resources Department
Liberty & Charlotte Streets, P. O. Box 3001
Lancaster, PA 17604

Telephone (717) 396-2729 or 396-2935

Division: Floor Products	Issued By: D. E. Bouder Senior Safety & Health Specialist Date: 6/24/86 (replaces 10/31/85)

N/A = Not Applicable or Not Available
N/K = None Known or Not Known

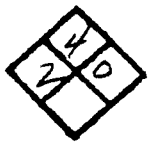
NFPA 704: Health = 2; Flammability = 3; Reactivity = 0 (ratings use five divisions from 0 to 4: 0 = no special hazard; 4 = severe hazard)

I. Product Information

A. Product Name: S-89 Adhesive (For the installation of Armstrong Resilient Tile)

B. Chemical Name and Synonyms: N/A

C. Chemical or Product Family: Solvent-dispersed Adhesive



PPE B

UN 1133

II. Ingredient Information

A. Ingredient	Approximate Percent	C.A.S. No.	PEL/TLV
VM&P Naphtha	27	8032-32-4	OSHA 500 ppm; ACGIH 300 ppm
Petroleum Grade Asphalt	72	8052-42-4	ACGIH 5mg/m^3 as a fume
Polyolefin Fiber	1	N/A	N/A

B. Precautionary Label Statement(s):
WARNING -- FLAMMABLE MIXTURE. DO NOT USE NEAR FIRE OR FLAME. Contains petroleum naphtha. Prevent buildup of vapors -- use with adequate ventilation -- open all doors and windows -- keep air circulating. Keep away from heat, sparks, and open flame. Prohibit smoking -- extinguish all flames and pilot lights -- turn off stoves, heaters, electric motors, and other sources of ignition until all vapors are gone. Keep container closed. If swallowed, do not induce vomiting -- call a physician immediately. Avoid prolonged breathing of vapors and prolonged contact with skin. Keep product out of reach of children.

III. Physical Data

A. Appearance and Color: Black asphalt mastic with hydrocarbon solvent odor
B. Boiling Point (degrees F): 212-320
C. Vapor Pressure (mm Hg 20 degrees C): 10.45
D. Vapor Density (Air = 1): 3.0
E. Solubility in Water: negligible
F. Specific Gravity (H_2O = 1): 0.92
G. Percent Volatile by Weight (30 min. @ 275 degrees F): 27
H. Evaporation Rate (Butyl Acetate = 1): N/K
I. pH: N/A

IV. Fire and Explosion Data

A. Flash Point: 52 degrees F
B. Flammable Limits: LEL = 1.0; UEL = 7.0
C. Extinguishing Media: Carbon dioxide, dry chemical, Halon
D. Special Fire Fighting Procedures: Protect fire fighters from toxic products of combustion by wearing self-contained breathing apparatus.
E. Unusual Fire and Explosion Hazards: Closed containers in a fire may rupture due to pressure build-up; use water to cool containers to prevent this.

AR200863

ORIGINAL
(Red)

V. **Health Data**

A. **Exposure Limits:** See Section II
B. **Effects of Overexposure:**
1. **Inhalation:** Irritation of respiratory tract, coughing, headache, dizziness, drowsiness, nausea, uncoordinated movements.
2. **Skin and Eyes:** Excessive skin contact may cause drying and cracking of the skin, and result in dermatitis. Contact with eyes will cause irritation and defatting of tissue.
C. **First Aid Procedures:**
1. **Inhalation:** Remove to fresh air if exposed to excess concentrations of vapor. Seek medical attention if symptoms persist.
2. **Skin and Eyes:** Flush any skin or eye contact with plenty of water. Additionally with skin contact, wash with soap and water. Refer to physician if irritation or symptoms persist.
3. **Ingestion:** Do not induce vomiting. Call Poison Control Center. Get immediate medical attention.

VI. **Reactivity Data**

A. **Stability:** Stable
B. **Incompatibility:** Strong oxidizing agents
C. **Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, and other toxic vapors and gases that are common to thermal degradation of organic compounds.
D. **Hazardous Polymerization:** Will not occur.

VII. **Spill or Leak Procedures**

A. **Steps to be taken if material is released or spilled:** Remove all sources of ignition. Ventilate area of spill or leak; if using mechanical ventilation, make sure that it is explosion-proof or does not present an ignition source. For exposures above TLV, wear approved respiratory equipment. Use absorbent to assist with the pick-up of material.
B. **Waste Disposal Method:** Incineration or other method approved for ignitible wastes in accordance with federal, state, and local regulations.

VIII. **Special Protection Information**

A. **Ventilation:** Use natural cross-ventilation, local (mechanical) pick-up, and/or general area (mechanical) ventilation to prevent an accumulation of solvent vapors, keeping in mind that the ventilation pattern must remove the heavier-than-air solvent vapors from the lower levels of the work spaces. The ventilation should be sufficient to keep the solvent vapor concentration below the TLV.
B. **Respiratory Protection:** With adequate ventilation, respiratory equipment should not be needed. If adequate ventilation is not afforded, wear respiratory equipment approved for organic vapors.
C. **Skin and Eye Protection:** During the manufacture and packaging of this product, impervious gloves, eye protection, and eye wash facilities may be appropriate. During normal end-product use, cotton or loop-pile gloves and spectacle-type safety glasses are recommended to prevent contact with this mastic product.

IX. **Special Precautions**

A. **Precautions to be taken in handling and storage:** Store in area suitable for flammable mixtures. Recommended storage temperature is below 90 degrees F.
B. **Other Precautions:** Vapors are flammable and are heavier-than-air. Prohibit smoking and eliminate all other sources of ignition, such as regular electrical tools and appliances, making sure that pilots on gas-fired water heaters are extinguished.

AR200864

The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

Armstrong

MATERIAL SAFETY DATA SHEET

ORIGINAL (Red)

Armstrong World Industries, Inc.
Human Resources Department
Liberty & Charlotte Streets, P. O. Box 3001
Lancaster, PA 17604

Telephone (717) 396-3739 or 396-3935

Division: Industry Products	Issued By: D. E. Bouder Senior Safety & Health Specialist Date: 10/9/85

N/A = Not Applicable or Not Available
N/K = None Known or Not Known

NFPA 704: Health = 2; Flammability = 3; Reactivity = 0 (ratings use five divisions from 0 to 4: 0 = no special hazard; 4 = severe hazard)

I. Product Information

A. Product Name: 520 Adhesive

B. Chemical Name and Synonyms: N/A

C. Chemical or Product Family: Solvent-dispersed synthetic rubber resin adhesive

II. Ingredient Information

A.

Ingredient	Approximate Percent	C.A.S. No.	PEL/TLV
Acetone	25	67-64-1	OSHA 1000 ppm; ACGIH 750 ppm
Toluene	15	108-88-3	OSHA 200 ppm; ACGIH 100 ppm
Petroleum Naphtha	35	8030-30-6	OSHA 500 ppm; ACGIH 400 ppm
Synthetic Rubber	13	N/A	N/K
Phenolic Resin	9	N/A	N/K
Rubber Curing Ingredients	3	N/A	N/K

B. Precautionary Label Statement(s):
DANGER -- EXTREMELY FLAMMABLE MIXTURE. DO NOT USE NEAR FIRE OR FLAME. Vapors may ignite explosively. Prevent buildup of vapors--open all windows and doors--use only with cross ventilation. Keep away from heat, sparks, and open flame. Do not smoke, extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors, and other sources of ignition during use and until all vapors are gone. Close container after use. Avoid prolonged breathing of vapor and prolonged contact with skin. Keep out of the reach of children.

III. Physical Data

A. Appearance and Color: Straw colored liquid with characteristic solvent odor.
B. Boiling Point (degrees F): >152
C. Vapor Pressure (mm Hg 20 degrees C): N/K
D. Vapor Density (Air = 1): N/K
E. Solubility in Water: negligible
F. Specific Gravity (H2O = 1): 0.83
G. Percent Volatile by Weight (30 min. @ 275 degrees F): 75
H. Evaporation Rate (Butyl Acetate = 1): N/K
I. pH: N/A

IV. Fire and Explosion Data

A. Flash Point: less than 20 degrees F
B. Flammable Limits: LEL = ; UEL = N/K
C. Extinguishing Media: Carbon dioxide, dry chemical, Halon
D. Special Fire Fighting Procedures: Protect fire fighters from toxic products of combustion by wearing self-contained breathing apparatus.
E. Unusual Fire and Explosion Hazards: Closed containers in a fire may rupture due to pressure build-up; use water to cool containers to prevent this.

AR200865

ORIGINAL
(Red)

V. Health Data

A. Exposure Limits: See Section II
B. Effects of Overexposure:
1. Inhalation: Irritation of respiratory tract, coughing, headache, dizziness, drowsiness, nausea, uncoordinated movements.
2. Skin and Eyes: Excessive skin contact may cause drying and cracking of the skin, and result in dermatitis. Contact with eyes will cause irritation and defatting of tissue.
C. First Aid Procedures:
1. Inhalation: Remove to fresh air if exposed to excess concentrations of vapor. Seek medical attention if symptoms persist.
2. Skin and Eyes: Flush any skin or eye contact with plenty of water. Additionally with skin contact, wash with soap and water. Refer to physician if irritation or symptoms persist.

VI. Reactivity Data

A. Stability: Stable
B. Incompatibility: Strong oxidizing agents
C. Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and other toxic vapors and gases that are common to thermal degradation of organic compounds.
D. Hazardous Polymerization: Will not occur.

VII. Spill or Leak Procedures

A. Steps to be taken if material is released or spilled: Remove all sources of ignition. Ventilate area of spill or leak; if using mechanical ventilation, make sure that it is explosion-proof or does not present an ignition source. For exposures above TLV, wear approved respiratory equipment. Use absorbent to assist with the pick-up of material.
B. Waste Disposal Method: Incineration or other method approved for ignitible wastes in accordance with federal, state, and local regulations.

VIII. Special Protection Information

A. Ventilation: Use natural cross-ventilation, local (mechanical) pick-up, and/or general area (mechanical) ventilation to prevent an accumulation of solvent vapors, keeping in mind that the ventilation pattern must remove the heavier-than-air solvent vapors from the lower levels of the work spaces. The ventilation should be sufficient to keep the solvent vapor concentration below the TLV.
B. Respiratory Protection: With adequate ventilation, respiratory equipment should not be needed. If adequate ventilation is not afforded, wear respiratory equipment approved for organic vapors.
C. Skin and Eye Protection: During the manufacture and packaging of this product, impervious gloves, eye protection, and eye wash facilities may be appropriate. During normal end-product use, cotton or loop-pile gloves and spectacle-type safety glasses are recommended to prevent contact with this mastic product.

IX. Special Precautions

A. Precautions to be taken in handling and storage: Store in area suitable for flammable mixtures. Recommended storage temperature is below 90 degrees F.
B. Other Precautions: Vapors are flammable and are heavier-than-air. Prohibit smoking and eliminate all other sources of ignition, such as regular electrical tools and appliances, making sure that pilots on gas-fired water heaters are extinguished.

AR200866

- -

The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

Armstrong

MATERIAL SAFETY DATA SHEET

Armstrong World Industries, Inc.
Human Resources Department
Liberty & Charlotte Streets, P. O. Box 3001
Lancaster, PA 17604

Telephone (717) 396-2729 or 396-2935

PPE 3

UN 1133

Division: Floor Products

Issued By: D. E. Bouder
Senior Safety & Health Specialist
Date: 11/5/85

N/A = Not Applicable or Not Available
N/K = None Known or Not Known

NFPA 704: Health = 2; Flammability = 3; Reactivity = 0 (ratings use five divisions from 0 to 4: 0 = no special hazard: 4 = severe hazard)

I. Product Information

A. Product Name: S-285 Wall Base Adhesive

B. Chemical Name and Synonyms: N/A

C. Chemical or Product Family: Solvent-dispersed adhesive

RECEIVED
C. MURAWSKY

II. Ingredient Information

A.

Ingredient	Approximate Percent	C.A.S. No.	PEL/TLV
VM&P Naphtha	10	8032-32-4	OSHA 500 ppm; ACGIH 300 ppm
Limed Rosin, Hydrocarbon Resin, Clay Filler, Fatty Acid Soaps	90	N/A	N/A

B. Precautionary Label Statement(s):
WARNING — FLAMMABLE MIXTURE. DO NOT USE NEAR FIRE OR FLAME. Contains petroleum naphtha. Prevent buildup of vapors — use with adequate ventilation — open all doors and windows -- keep air circulating. Keep away from heat, sparks, and open flame. Prohibit smoking — extinguish all flames and pilot lights -- turn off stoves, heaters, electric motors, and other sources of ignition until all vapors are gone. Keep container closed. If swallowed, do not induce vomiting -- call a physician immediately. Avoid prolonged breathing of vapors and prolonged contact with skin. Keep out of reach of children.

III. Physical Data

A. Appearance and Color: Brown mastic consistency with rosin-like odor
B. Boiling Point (degrees F): N/K
C. Vapor Pressure (mm Hg 20 degrees C): N/K
D. Vapor Density (Air = 1): N/K
E. Solubility in Water: negligible
F. Specific Gravity (H2O = 1): 1.41
G. Percent Volatile by Weight (30 min. @ 275 degrees F): 10
H. Evaporation Rate (Butyl Acetate = 1): N/K
I. pH: N/A

IV. Fire and Explosion Data

A. Flash Point: 85 degrees F
B. Flammable Limits: LEL = ; UEL = N/K
C. Extinguishing Media: Carbon dioxide, dry chemical, Halon, water spray
D. Special Fire Fighting Procedures: Protect fire fighters from toxic products of combustion by wearing self-contained breathing apparatus.
E. Unusual Fire and Explosion Hazards: Closed containers in a fire may rupture due to pressure build-up; use water to cool containers to prevent this.

AR200867

ORIGINAL (Red)

V. **Health Data**

A. **Exposure Limits:** See Section II
B. **Effects of Overexposure:**
1. **Inhalation:** Irritation of respiratory tract, coughing, headache, dizziness, drowsiness, nausea, uncoordinated movements.
2. **Skin and Eyes:** Excessive skin contact may cause drying and cracking of the skin, and result in dermatitis. Contact with eyes will cause irritation and defatting of tissue.
C. **First Aid Procedures:**
1. **Inhalation:** Remove to fresh air if exposed to excess concentrations of vapor. Seek medical attention if symptoms persist.
2. **Skin and Eyes:** Flush any skin or eye contact with plenty of water. Additionally with skin contact, wash with soap and water. Refer to physician if irritation or symptoms persist.
3. **Ingestion:** Do not induce vomiting. Call Poison Control Center or physician for directions.

VI. **Reactivity Data**

A. **Stability:** Stable
B. **Incompatibility:** Strong oxidizing agents
C. **Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, and other toxic vapors and gases that are common to thermal degradation of organic compounds.
D. **Hazardous Polymerization:** Will not occur.

VII. **Spill or Leak Procedures**

A. **Steps to be taken if material is released or spilled:** Remove all sources of ignition. Ventilate area of spill or leak; if using mechanical ventilation, make sure that it is explosion-proof or does not present an ignition source. For exposures above TLV, wear approved respiratory equipment. Scrape up material and place into container.
B. **Waste Disposal Method:** Incineration or other method approved for ignitible wastes in accordance with federal, state, and local regulations.

VIII. **Special Protection Information**

A. **Ventilation:** Use natural cross-ventilation, local (mechanical) pick-up, and/or general area (mechanical) ventilation to prevent an accumulation of solvent vapors, keeping in mind that the ventilation pattern must remove the heavier-than-air solvent vapors from the lower levels of the work spaces. The ventilation should be sufficient to keep the solvent vapor concentration below the TLV.
B. **Respiratory Protection:** With adequate ventilation, respiratory equipment should not be needed. If adequate ventilation is not afforded, wear respiratory equipment approved for organic vapors.
C. **Skin and Eye Protection:** During the manufacture and packaging of this product, impervious gloves, eye protection, and eye wash facilities may be appropriate. During normal end-product use, cotton or loop-pile gloves and spectacle-type safety glasses are recommended to prevent contact with this mastic product.

IX. **Special Precautions**

A. **Precautions to be taken in handling and storage:** Store in area suitable for flammable mixtures. Recommended storage temperature is below 90 degrees F.
B. **Other Precautions:** Vapors are flammable and are heavier-than-air. Prohibit smoking and eliminate all other sources of ignition, such as regular electrical tools and appliances, making sure that pilots on gas-fired water heaters are extinguished.

AR200868

The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

ORIGINAL (Red)

Product Safety Data Sheet

ELANCO™

Elanco Products Company, A Division of Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285

Balan® 2.5G

ID 5900; FN1005

BALAN® 2.5G granule is a selective preemergence herbicide for the control of crabgrass and most other annual weed grasses on lawns and golf courses.

I. PHYSICAL AND CHEMICAL PROPERTIES

A. Active Ingredient Generic Name
Benefin

B. Chemical Name
N-butyl-N-ethyl-α,α,α,-trifluoro-2,6-dinitro-*p*-toluidine

C. Product Components

Benefin	2.5%
Inert Ingredients	97.5%

D. DOT Classification
Nonregulated

E. Normal Physical State
Yellowish granular material having faint aromatic odor

F. Auto-Ignition Temperature
No ignition up to 1382°F (750°C)

G. Flashpoint
No ignition up to 200°F (93.3°C)

H. Explosive Limit
Not applicable

I. Solubility
Not soluble in water

J. Threshold Limit Value
Not established

K. pH (aqueous 50/50)
9.0

II. STABILITY AND STORAGE

Store in original container only. Do not contaminate water, food, or feed by storage or disposal.

III. UNUSUAL FIRE AND EXPLOSION HAZARDS

None known

IV. SPILL INFORMATION

In case of leak or spill, contain material and dispose as waste. Do not contaminate any body of water. Sweep up material. Place it and damaged unusable containers in a landfill approved for pesticides in accordance with applicable regulations. Avoid dusting.

Large spills due to traffic accidents, etc., should be reported immediately to CHEMTREC and Elanco Products Company for assistance. Prevent spilled material from flowing onto adjacent land or into streams, ponds or lakes.

V. PROTECTIVE EQUIPMENT REQUIREMENTS

When handling molten material during manufacture, wear goggles to protect eyes, wear impermeable gloves and protective equipment to avoid direct contact with skin. In enclosed spaces, wear NIOSH (1) approved respirator for organic solvent vapors. Intense staining of the skin will occur on contact.

For instances of prolonged contact with the dry material during manufacturing or reformulation, dust goggles, NIOSH (1) approved respirator for nuisance dust and protective skin covering should be worn.

VI. FIRE FIGHTING INFORMATION

Considered nonflammable. May emit fumes when heated to decomposition. Do not allow water run-off from fire site to enter nearby streams, ponds or lakes. Keep containers cooled with water spray.

NOTE: In case of an emergency involving human ingestion or contact, call the Eli Lilly and Company telephone operator, (317) 261-

AR200869

Emergency Information

In the event an individual has accidentally consumed or has been overly exposed to an Elanco product, follow the first aid procedures set forth in this document. If further information is required, have a physician contact Dr. Chernish, M.D., (317) 261-2659. If Dr. Chernish cannot be reached, call Dr. Goldberg, M.D., (317) 261-2848. If Dr. Goldberg cannot be reached, call Dr. Cloud, M.D., (317) 261-8924. After working hours or weekends call (317) 261-2000. In case of a large chemical spill or contamination, call (317) [illegible] or weekends (317) [illegible]

This Product Safety Sheet is principally [illegible] and formulators whose personnel m[illegible] ded for use by manufacturers, safety hygiene and medical personnel. For users of the formulated and packaged product, follow label directions.

All information contained herein is offered in good faith and with the belief that it is accurate. As of the date of issuance, we are providing all information that we have or are aware of relevant to the foreseeable use or handling of the product. However, in the event of an adverse incident associated with this product, this Safety Sheet is not, and is not intended, to be a substitute for consultation with [illegible]

Product Safety Data Sheet

ELANCO™

ORIGINAL "Red"

Elanco Products Company · A Division of Eli Lilly and Company · Lilly Corporate Center · Indianapolis, IN 46285

Balan® E. C.

ID 5023/5805; FN 0270

BALAN® E. C., emulsifiable concentrate, is a selective herbicide for the preemergence control of annual grasses and broadleaf weeds.

I. PHYSICAL AND CHEMICAL PROPERTIES

A. Active Ingredient Generic Name
Benefin

B. Chemical Name
N-butyl-N-ethyl-α,α,α,-trifluoro-2,6-dinitro-*p*-toluidine

C. Product Components

Benefin	18.0%
Inert Ingredients	82.0%
Contains 76% xylene	

D. DOT Classification
Flammable liquid

E. Normal Physical State
Clear yellow liquid with a characteristic aromatic hydrocarbon odor

F. Auto-Ignition Temperature
637°F (336°C)

G. Flashpoint
76°F (24.5°C)

H. Explosive Limit
1.7 ± 0.1 mol. % at 203°F (95°C)

I. Solubility
Emulsifies in water

J. Threshold Limit Value
Not established

K. pH (aqueous 50/50)
6.2

L. Boiling Point (at 1 atmosphere)
219°F (104°C)

M. Vapor Pressure
16.5 mm Hg at 25°C

N. Vapor Specific Gravity
1.06 relative to air at 25°C

O. Specific Gravity
0.93 to 0.95 at 25°C

II. STABILITY AND STORAGE

Avoid freezing. Store above 40°F (5°C). If this product has been frozen, poor weed control may result. Do not store near heat or open flame. Store in original container only. Do not contaminate water, food, or feed by storage or disposal.

III. UNUSUAL FIRE AND EXPLOSION HAZARDS

Classified as a flammable liquid (flashpoint 76°F/24.5°C). Emits toxic fumes when heated to decomposition. Closed containers may explode when subjected to excessive heat or intense fire due to pressure build-up.

IV. SPILL INFORMATION

In case of leak or spill, use absorbent materials to contain liquids and dispose as wastes. Do not contaminate any body of water. Small spills should be cleaned up with a suitable absorbent material. Prohibit use of hot or sparking equipment in immediate area. Place material and unusable containers in a landfill approved for pesticides in accordance with applicable state regulations.

Large spills due to traffic accidents, etc., should be reported immediately to CHEMTREC and Elanco Products Company for assistance. Prevent spilled material from flowing on adjacent land or into streams, ponds or lakes.

V. PROTECTIVE EQUIPMENT REQUIREMENTS

During manufacture, wear goggles to protect eyes, wear impermeable gloves and protective equipment to avoid direct contact with skin. In enclosed spaces, wear NIOSH (1) approved respirator for organic solvent vapors.

VI. FIRE FIGHTING INFORMATION

Use water, CO_2, or dry chemicals to extinguish. Emits toxic fumes when heated to decomposition. Wear full protective clothing and use self-contained breathing apparatus. Nonessential personnel should be restricted from area of intense smoke. Do not allow water run-off from fire site to enter nearby streams, ponds, or lakes. Keep containers cooled with water spray.

NOTE: In case of an emergency involving human ingestion or contact, call the Eli Lilly and Company telephone operator, (317) [illegible] call.

Emergency Information

In the event an individual has accidentally consumed or has been overly exposed to an Elanco product, follow the first aid procedures set forth in this document. If further information is required, have a physician contact [illegible] Chernish, M.D., (317) 261-2585. If Dr. Chernish cannot be reached, call M. [illegible] Goldberg, M.D., (317) 261-[illegible]. If Dr. Goldberg cannot be reached, call M. L. Cloud, M.D., (317) 261-6624. After working hours or weekends call (317) 261-[illegible] 2000. In case of a large chemical spill or contamination, call (317) 261-2070, at night or weekends (317) 261-[illegible] or call (703) 424-9300.

This Product Safety Sheet is princ[illegible] [illegible]essors and formulators whose personnel [illegible] [illegible]nded for use by manufacturers, safety hygi[illegible] [illegible] of the formulated and packaged product, follow label directions.

All information contained herein is offered in good faith and with the belief that it is accurate. As of the date of issuance, we are providing all information that we have or are aware of relevant to the foreseeable use or handling of the product. However, in the event of an adverse incident associated with this product, this Safety Sheet is not, and is not intended, to be a substitute for consultation with [illegible]

AR200870

VII. TOXICOLOGY

A. Acute Exposure (BALAN E.C.)

1. **Eyes**—BALAN E.C. when placed in the eyes of rabbits caused severe damage.
2. **Skin**—Severe dermal irritation but no systemic toxicity occurred when 2 ml of BALAN E.C. per kg of body weight were applied to the shaved and abraded backs of rabbits for 24 hours.
3. **Inhalation**—Rats exposed for one hour to an atmosphere containing a liquid droplet aerosol of BALAN E.C. at a concentration of 0.9 mg/L of air were unaffected.
4. **Ingestion**—Rats were given a single oral dose of 0.5 ml of BALAN E.C. per kg of body weight. No deaths or overt signs of toxicity occurred during the 14-day observation period.
5. **Sensitization**—Based on positive findings from a guinea pig sensitization study of technical benefin in alcohol, BALAN E.C. should be considered a potential contact sensitizer.

VIII. HUMAN HEALTH

Laboratory animal studies that have been conducted with benefin indicate that the use of benefin does not present a hazard when recommended handling procedures are followed.*

IX. FIRST AID (Statement of Practical Treatment)

A. **Eyes**—Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. See an ophthalmologist (eye doctor) immediately.

B. **Skin**—Wash all exposed areas with plenty of soap and water immediately. Wash all contaminated clothes before reuse. Call a physician if irritation persists.

C. **Inhalation**—Remove individual to fresh air. If breathing difficulty occurs, provide cardiopulmonary resuscitation assistance and get medical attention.

D. **Ingestion**—Contact a physician immediately. This product contains an aromatic hydrocarbon and can be extremely harmful if swallowed. If this happens, and the patient is conscious, IMMEDIATELY ADMINISTER activated charcoal (6-8 heaping teaspoonfuls) with water. Do not give anything by mouth to an unconscious person. Gastric lavage with a cuffed endotracheal tube to prevent aspiration should be completed within 15 minutes. In the absence of depression, convulsions, or impaired gag reflex, vomiting can be induced with a blunt instrument or finger. MAKE CERTAIN VOMITUS IS NOT INHALED BY RAISING HIPS HIGHER THAN HEAD. If patient is unconscious, DO NOT INDUCE VOMITING.

X. LABEL STATEMENTS

A. Container Disposal

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

B. Dangers

1. **Human**—Keep out of reach of children. Corrosive. Causes eye damage. Do not get in eyes. Avoid contact with skin, eyes, or clothing. Harmful if swallowed or absorbed through the skin. BALAN E.C. may cause skin sensitization reactions in certain individuals. Use eye protection or face shield and protective clothing such as coveralls, a long sleeved shirt, and impermeable gloves when handling this product. Do not contaminate foodstuffs or feeds.
2. **Environmental**—This product is toxic to fish. Do not contaminate any body of water by direct application, cleaning of equipment or disposal of wastes.

EPA Registration Number: 1471-55 (ID5023);
1471-77 (ID5805)
Chemical Abstract Registry Number: 1861-40-1

XI. REFERENCES

(1) 1985 NIOSH Certified Equipment Guide

NOTE: This information applies only to BALAN E.C. which is sold in the U.S.

*For user handling procedures, refer to product label; for manufacturing handling procedures refer to NACA Guidelines for the Good Workplace Standard for the Manufacturing and Formulation of Pesticides.

AR200871

This Elanco Product Safety Data Sheet meets or exceeds the requirements of OSHA's Hazard Communication Standard

Issued 4/1/85
Supercedes 1/10/83

MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION

MANUFACTURER'S NAME	UNION RUBBER, INC.	REGULAR TELEPHONE NO. / EMERGENCY TELEPHONE NO.	(609) 396-9328 / (713) 656-3424
ADDRESS	232 Allen Street, Trenton, New Jersey 08606	P.O. Box 1040	
TRADE NAME	BESTINE Solvent & Thinner		
SYNONYMS	Commercial Hexane		
SHIPPING NAME[1]	DOT: Hexane	DOT Ident. No.	UN1208
	IATA: Hexane	IATA Ident. No.	UN1208

II HAZARDOUS INGREDIENTS[2]

MATERIAL OR COMPONENT	CAS NO.	%	HAZARD DATA
n-Hexane	110-54-3	40.	See below

The presence (approximately 40%) of n-Hexane (normal hexane) in this solvent mixture represents a distinct hazard of producing peripheral polyneuropathy, a progressive disorder of the nervous system, which with sufficient high exposure has the potential of becoming irreversible. This disorder has been observed in individuals exposed repeatedly to high vapor concentrations (1000-1500 ppm) of n-Hexane over a period of several months. BESTINE exposure should be controlled to keep the maximum level below 100 ppm which will result in n-Hexane exposure of less than 50 ppm.

III PHYSICAL DATA

BOILING POINT, 760 MM HG	IBP-DryPt. 149-157°F	MELTING POINT	Liquid
SPECIFIC GRAVITY (H_2O = 1)	0.67	VAPOR PRESSURE	@100°F 6.4 psi
VAPOR DENSITY (AIR = 1)	3.0	SOLUBILITY IN H_2O % BY WT	Negligible
% VOLATILES BY VOL.	100.	EVAPORATION RATE (BUTYL ACETATE = 1)	15.8
APPEARANCE AND ODOR	Water white liquid. Mild pleasant hydrocarbon odor.	Ph (AS IS) / Ph (1% SOLN.)	Not applicable.

IV FIRE AND EXPLOSION DATA

FLASH POINT (TEST METHOD)	<0°F Tag Closed Cup.	AUTOIGNITION TEMPERATURE	615°F
FLAMMABLE LIMITS IN AIR, % BY VOL.	LOWER 1.2%	UPPER	6.9%
EXTINGUISHING MEDIA	Foam, dry chemical, CO_2, water fog or spray.		
SPECIAL FIRE FIGHTING PROCEDURES	Use air-supplied equipment for enclosed areas. Cool exposed containers with water spray. Avoid breathing vapor.		
UNUSUAL FIRE AND EXPLOSION HAZARD	Do not store or mix with strong oxidants such as liquid chlorine or concentrated oxygen. Extremely flammable liquid.		

AR200872

ORIGINAL (Red)

V HEALTH HAZARD INFORMATION

HEALTH HAZARD DATA	HAZARD CLASSIFICATION	BASIS FOR CLASSIFICATION	SOURCE
ROUTES OF EXPOSURE			
INHALATION	Slightly toxic	70,000 ppm 4 hrs. exposure $< LC_{50}$ (rat)	Exxon Corp.
SKIN CONTACT	Slightly toxic	Defats the skin which can cause irritation and dermatitis.	Exxon Corp.
SKIN ABSORPTION	None	Not absorbed.	Exxon Corp.
EYE CONTACT	Mild irritant	Does not injure eye tissue.	Exxon Corp.
INGESTION	Slightly toxic	25 ml/Kg $< LD_{50}$ (rat)	Exxon Corp.

EFFECTS OF OVEREXPOSURE

ACUTE OVEREXPOSURE Headaches, dizziness and in extreme cases - unconsciousness.

CHRONIC OVEREXPOSURE In excess of 500 ppm, can cause peripheral polyneuropathy.

EMERGENCY AND FIRST AID PROCEDURES

EYES: Flush with water continuously until irritation subsides.

SKIN: Remove contaminated clothing, wash with soap and water.

INHALATION: Remove from exposure immediately. If breathing is irregular or stopped, start resuscitation, administer oxygen. Call a Physician.

INGESTION: Keep subject calm and at rest. DO NOT induce vomiting. Call a Physician.

NOTES TO PHYSICIAN

AR200873

ORIGINAL (Red)

VI REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY

Stable material.

INCOMPATIBILITY Strong oxidants such as liquid chlorine, concentrated oxygen, sodium and calcium hypochlorite.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide in the event of incomplete combustion.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

Does not occur.

VII DISPOSAL, SPILL OR LEAK PROCEDURES

AQUATIC TOXICITY (E.G. 96 HR. TLM):

Not applicable.

WASTE DISPOSAL METHOD

Assure conformity with applicable disposal regulations. Dispose of absorbed material at an approved dispoal site or facility. (Caution: See Section II)

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED Remove all ignition sources. Keep people away Recover free liquid. Keep out of sewers and streams by diking or impounding. Add absorbent (sand, earth, sawdust, etc.) to spill area. Avoid breathing vapors. Ventilate confined spaces. Open all windows and doors.

NEUTRALIZING CHEMICALS

None.

VIII SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS

There should be sufficient air movement in the work area to prevent buildup of toxic or flammable concentrations of vapor in the air.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY (SPECIFY IN DETAIL) Use hydrocarbon vapor canister or supplied-air respiratory protection in confined or enclosed spaces if needed.

EYE Use splash goggles or face shield when eye contact may occur.

AR200874

VES Ues chemical-resistant gloves, if needed to avoid repeated or prolonged skin contact.

OTHER CLOTHING AND EQUIPMENT Use chemical-resistant apron or other clothing if needed to avoid repeated or prolonged skin contact.

BUTCHER'S

Material Safety Data Sheet

00710

Manufacturer's Name	The Butcher Polish Company	Emergency Telephone No	(617) 481-5700
Address	120 Bartlett Street, Marlborough, MA 01752		
Signature of Person Responsible for Preparation	Bonita C Patterson	Date Prepared	March 19, 1985

IDENTITY

Common Name (used on label) Trade Name & Synonyms) BRIGHT Washroom Cleaner

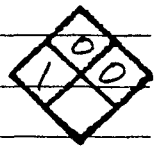
INGREDIENT INFORMATION

Principal Hazardous Component(s) (chemical & common name(s))	CAS No	%	Threshold Limit Value (units)
2-Butoxy ethanol	111-76-2	3-5	25ppm Skin
Ammonium hydroxide	1336-21-6	0.5-1	25ppm
Butane	106-97-8	3-5	800ppm

RECEIVED

SEP 30 1986

C. MURAWCZYK



PPE B

UN 1142

PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	212°F	Specific Gravity (H_2O = 1)	NA	Vapor Pressure	50-55 psig @ 64°F
Percent Volatile by Volume (%)	NA	Vapor Density (Air = 1)	ND	Evaporation Rate (_____ = 1)	ND
Solubility in Water	Complete				
Appearance and Odor	Aerosol product; floral odor				

Flash Point NA Flammable Limits in Air % by Volume Lower ND Upper Extinguisher Media Foam, CO_2, dry chemical water

Special Fire Fighting Procedures This product is not flammable as per 16 CFR 1500.45. Cool uninvolved containers with water. Full protective equipment should be worn when this product is involved in a fire.

Unusual Fire and Explosion Hazards Contents under pressure. Container may explode if exposed to excessive heat.

AR200875

ND = Not Determined NE = Not Established NA = Not Applicable

BUTCHER'S

Common Name (used on label)
Trade Name & Synonyms) BRIGHT Washroom Cleaner

REACTIVITY DATA

Stability Conditions to Avoid: None known

Incompatibility (Materials to Avoid): Anionic material, oxidizers (e.g. bleach)

Hazardous Decomposition Products: Normal products of combustion.

Hazardous Polymerization: Will Occur / Will Not Occur Conditions to Avoid: None known to THE BUTCHER POLISH COMPANY

HAZARD DATA

Signs and Symptoms of Overexposure: Causes eye damage and skin irritation. Harmful if swallowed. Inhalation of mist may irritate respiratory tract. Preexisting eye, skin and respiratory disorders may be aggravated.

Is Material Listed as Carcinogen or Potential Carcinogen: None

Emergency and First Aid Procedures

Inhalation: Remove to fresh air. Call a physician if symptoms persist.

Eyes: Flush with water for at least 15 minutes. Call a physician.

Skin: Flush with water. Call a physician if irritation develops.

Ingestion: Drink large quantities of water. Do not induce vomiting. Call a physician.

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required if good ventilation is maintained.

Gloves: When skin contact may be a problem, wear rubber or other impervious gloves.

Eye Protection: Where eye contact may be a problem, wear chemical splash goggles and face shield.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage: Use good personal hygiene practice. Wash contaminated clothing and equipment before reuse.

Steps to be Taken in Case Materials Released or Spilled: Before attempting clean-up, refer to Hazard Data above. Wipe up spill and rinse area with water.

Waste Disposal Methods: Dispose of this material in accordance with federal, state and local regulations.

AR200876

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.

BUTCHER'S

Material Safety Data Sheet

00180

Manufacturer's Name: The Butcher Polish Company

Emergency Telephone No: (617) 481-5700

Address: 120 Bartlett Street, Marlborough, MA 01752

Signature of Person Responsible for Preparation: Bonita C Patterson

Date Prepared: March 19, 1985

IDENTITY

Common Name (used on label) Trade Name & Synonyms): DEODORANT

INGREDIENT INFORMATION

Principal Hazardous Component(s) (chemical & common name(s))	CAS No	%	Threshold Limit Value (units)
2-Butoxy ethanol	111-76-2	3-6	25ppm Skin

2 1 0

RECEIVED

SEP 30 1986

C. MURAWCZYK

PPE B

UN 1142

PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point: 212°F

Specific Gravity (H_2O = 1): 0.99

Vapor Pressure: ND

Percent Volatile by Volume (%): 88

Vapor Density (Air = 1): ND

Evaporation Rate (_____ = 1): NA

Solubility in Water: Complete

Appearance and Odor: Clear green liquid; mild fruity odor.

Flash Point: 145°F

Flammable Limits in Air % by Volume: Lower ND Upper

Extinguisher Media: Water, dry chemical, CO_2, foam

Special Fire Fighting Procedures: In case of fire, cool uninvolved containers with water.

Unusual Fire and Explosion Hazards: When exposed to temperatures above 120°F, build-up vapor may occur.

AR200877

ND = Not Determined NE = Not Established NA = Not Applicable

BUTCHER'S

Common Name (used on label)
Trade Name & Synonyms) DEODORANT

REACTIVITY DATA

Stability Unstable ☐ Conditions
Stable ☒ to Avoid None known

Incompatibility
Materials to Avoid None known to THE BUTCHER POLISH CO.

Hazardous
Decomposition Products Normal products of combustion.

Hazardous
Polymerization May Occur ☐ Conditions
Will Not Occur ☒ to Avoid None known to THE BUTCHER POLISH CO.

HAZARD DATA

Signs and
Symptoms of Overexposure Direct contact of product with eyes may cause irritation. Inhalation of vapor may irritate respiratory tract. Pre-existing eye, skin and respiratory disorders may be aggravated.

Chemical Listed as Carcinogen
or Potential Carcinogen None

Emergency and
First Aid Procedures

1. Inhalation Remove to fresh air. Call a physician if symptoms persist.
2. Eyes Flush with water for at least 15 minutes. Call a physician.
3. Skin Flush with water. Call a physician if irritation develops.
4. Ingestion Drink large quantities of water. Do not induce vomiting. Call a physician.

SPECIAL PROTECTION INFORMATION

Respiratory Protection None required if good ventilation is maintained.

Protective
Gloves If prolonged or repeated contact is possible, wear rubber or other impervious gloves.

Eye
Protection Where eye contact may be a problem, wear chemical splash goggles.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken
in Handling and Storage Practice good personal hygiene. Wash contaminated clothing and equipment before reuse.

Steps to be Taken in Case
Material is Released or Spilled Before attempting clean-up, refer to Hazard Data above. Use mop or wet vacuum to collect material for proper disposal. Rinse area with water.

Waste Disposal
Methods Dispose of this material in accordance with federal, state and local regulations.

AR200878

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user

ORIGINAL (Red)

BUTCHERS®

Material Safety Data Sheet

00190

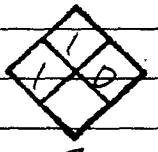
Manufacturer's Name	The Butcher Polish Company	Emergency Telephone No	(617) 481-5700
Address	120 Bartlett Street, Marlborough, MA 01752		
Signature of Person Responsible for Preparation	Bonita C Patterson	Date Prepared	March 19, 1985

IDENTITY

Common Name (used on label) Trade Name & Synonyms) PEARLY Tile and Porcelain Cleaner

INGREDIENT INFORMATION

Principal Hazardous Component(s) (chemical & common name(s))	CAS No.	%	Threshold Limit Value (units)
1-Butoxyethoxy-2-propanol	124-16-3	1-3	NE
Citric acid	77-92-9	1-2	NE
Monoethanolamine	141-43-5	1	3ppm



PPE B

UN 1262

RECEIVED
SEP 30 1986
C. MURAWCZYK

PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	212°F			Specific Gravity (H_2O = 1)	1.04	Vapor Pressure	ND
Percent Volatile by Volume (%)	91	Vapor Density (Air = 1)	ND	Evaporation Rate (_____ = 1)	NA		
Solubility in Water	Complete						
Appearance and Odor	Pearlescent pink liquid, mild fruity odor.						

Flash Point	200°F +	Flammable Limits in Air % by Volume	Lower ND	Upper	Extinguisher Media	NA	
Special Fire Fighting Procedures	This product is not flammable.						

Unusual Fire and Explosion Hazards: None known to THE BUTCHER POLISH CO.

AR200879

ND = Not Determined NE = Not Established NA = Not Applicable

BUTCHER'S

Common Name (used on label)
Trade Name & Synonyms) PEARLY Tile and Porcelain Cleaner

REACTIVITY DATA

Stability Unstable ☐ Conditions
Stable ☒ to Avoid None known

Incompatibility
Materials to Avoid Metals (e.g. aluminum), oxidizers (e.g. bleach), and nitrosating agents (e.g. sodium nitrite).

Hazardous
Decomposition Products Normal products of combustion.

Hazardous
Polymerization May Occur ☐ Conditions
Will Not Occur ☒ to Avoid None known to THE BUTCHER POLISH CO.

HAZARD DATA

Signs and
Symptoms of Overexposure Inhalation of mist may irritate respiratory tract.

Pre-existing eye, skin and respiratory disorders may be aggravated.

Chemical Listed as Carcinogen
or Potential Carcinogen None

Emergency and
First Aid Procedures

1. Inhalation Remove to fresh air. Call a physician if symptoms persist.
2. Eyes Flush with water for at least 15 minutes. Call a physician.
3. Skin Flush with water. Call a physician if irritation develops.
4. Ingestion Drink large quantities of water. Do not induce vomiting. Call a physician.

SPECIAL PROTECTION INFORMATION

Respiratory Protection None required if good ventilation is maintained.

Protective
Gloves If prolonged or repeated contact is possible, wear rubber or other impervious gloves.

Eye
Protection Where eye contact may be a problem, wear chemical splash goggles.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken
in Handling and Storage Practice good personal hygiene. Wash contaminated clothing and equipment before reuse.

Steps to be Taken in Case
Material is Released or Spilled Before attempting clean-up, refer to Hazard Data above. Use mop or wet vacuum to collect material for proper disposal. Rinse area with water.

Waste Disposal
Methods Dispose of this material in accordance with federal, state and local regulations.

AR200880

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.

BUTCHER'S

Material Safety Data Sheet

00010

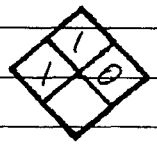
Manufacturer's Name	The Butcher Polish Company	Emergency Telephone No	(617) 481-5700
Address	120 Bartlett Street, Marlborough, MA 01752		
Signature of Person Responsible for Preparation	Bonita C Patterson	Date Prepared	March 19, 1985

IDENTITY

Common Name (used on label) Trade Name & Synonyms) SPEEDBALL Power Cleaner

INGREDIENT INFORMATION

Principal Hazardous Component(s) (chemical & common name(s))	CAS No	%	Threshold Limit Value (units)
2-Butoxy ethanol	111-76-2	3-6	25ppm Skin
Monoethanolamine	141-43-5	1-2	3ppm



PPE B

UN 1142

PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point 212°F | Specific Gravity (H_2O = 1) 1.0 | Vapor Pressure ND

Percent Volatile by Volume (%) 98 | Vapor Density (Air = 1) ND | Evaporation Rate (_____ = 1) NA

Solubility in Water Complete

Appearance and Odor Clear green liquid; mint odor

Flash Point 200°F+ | Flammable Limits in Air % by Volume Lower ND Upper | Extinguisher Media NA

Special Fire Fighting Procedures This product is not flammable

RECEIVED

SEP 30 1986

C. MURAWCZYK

Unusual Fire and Explosion Hazards None known to THE BUTCHER POLISH COMPANY

AR200881

ND = Not Determined NE = Not Established NA = Not Applicable

BUTCHER'S

Common Name (used on label)
Trade Name & Synonyms) SPEEDBALL Power Cleaner

REACTIVITY DATA

Stability: Unstable ☐ Conditions
Stable ☒ to Avoid — None known

Incompatibility
Materials to Avoid — Acids (e.g. muriatic), oxidizer (e.g. bleach) and sodium nitrite.

Hazardous
Decomposition Products — Normal products of combustion.

Hazardous Polymerization: May Occur ☐ Will Not Occur ☒ Conditions to Avoid — None known to THE BUTCHER POLISH CO.

HAZARD DATA

Signs and
Symptoms of Overexposure — Direct contact of product with eyes may cause burns. Prolonged or repeated contact with skin may cause irritation. Inhalation of mist may irritate respiratory tract. Pre-existing eye, skin and respiratory disorders may be aggravated.

Chemical Listed as Carcinogen
or Potential Carcinogen

Emergency and
First Aid Procedures

1 Inhalation — Remove to fresh air. Call a physician if symptoms persist.

2 Eyes — Flush with water for at least 15 minutes. Call a physician.

3 Skin — Flush with water. Call a physician if irritation develops.

4 Ingestion — Drink large quantities of water. Do not induce vomiting. Call a physician.

SPECIAL PROTECTION INFORMATION

Respiratory Protection — None required if good ventilation is maintained.

Protective
Gloves — If prolonged or repeated contact is possible, wear rubber or other impervious gloves.

Eye
Protection — Where eye contact may be a problem, wear chemical splash goggles and face shield.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken
in Handling and Storage — Practice good personal hygiene. Wash contaminated clothing and equipment before reuse.

Steps to be Taken in Case
Material is Released or Spilled — Before attempting clean-up, refer to Hazard Data above. Use mop or wet vacuum to collect material for proper disposal. Rinse area with water.

Waste Disposal
Methods — Dispose of this material in accordance with federal, state and local regulations.

AR200882

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.

BUTCHER'S

Material Safety Data Sheet

00210

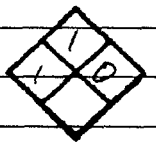
Manufacturer's Name	The Butcher Polish Company	Emergency Telephone No	(617) 481-5700
Address	120 Bartlett Street, Marlborough, MA 01752		
Signature of Person Responsible for Preparation	Bonita C Patterson	Date Prepared	March 19, 1985

IDENTITY

Common Name (used on label) Trade Name & Synonyms) SUNBATH Deodorizing Cleaner

INGREDIENT INFORMATION

Principal Hazardous Component(s) (chemical & common name(s))	CAS No	%	Threshold Limit Value (units)
2-Butoxy ethanol	111-76-2	2-4	25ppm Skin



PPE B

UN 1142

PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	212°F			Specific Gravity (H_2O = 1)	1.01	Vapor Pressure	ND
Percent Volatile by Volume (%)	94	Vapor Density (Air = 1)	ND	Evaporation Rate (_____ = 1)	NA		
Solubility in Water	Complete						
Appearance and Odor	Clear blue liquid; fruity odor.						

Flash Point	200°F+	Flammable Limits in Air % by Volume	Lower ND	Upper	Extinguisher Media	NA	
Special Fire Fighting Procedures	This product is not flammable.						
Unusual Fire and Explosion Hazards	None known to THE BUTCHER POLISH CO.						

RECEIVED
SEP 30 1986
C. MURAWCZYK

AR200883

ND = Not Determined NE = Not Established NA = Not Applicable

BUTCHER'S

Common Name (used on label)
Trade Name & Synonyms) SUNBATH Deodorizing Cleaner

REACTIVITY DATA

Stability Unstable ☐ Conditions
Stable ☒ to Avoid None known

Incompatibility
Materials to Avoid None known to THE BUTCHER POLISH CO.

Hazardous
Decomposition Products Normal products of combustion.

Hazardous
Polymerization May Occur ☐ Conditions
Will Not Occur ☒ to Avoid None known to THE BUTCHER POLISH CO.

HAZARD DATA

Signs and
Symptoms of Overexposure Direct contact of product with eyes and skin may cause irritation. Inhalation of mist may irritate respiratory tract. Pre-existing eye, skin and respiratory disorders may be aggravated.

Chemical Listed as Carcinogen
or Potential Carcinogen* None

Emergency and
First Aid Procedures

1 Inhalation Remove to fresh air. Call a physician if symptoms persist.

2 Eyes Flush with water for at least 15 minutes. Call a physician.

3 Skin Flush with water. Call a physician if irritation develops.

4 Ingestion Drink large quantities of water. Do not induce vomiting. Call a physician.

SPECIAL PROTECTION INFORMATION

Respiratory Protection None required if good ventilation is maintained.

Protective
Gloves If prolonged or repeated contact is possible, wear rubber or impervious gloves.

Eye
Protection Where eye contact may be a problem, wear chemical splash goggles.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken
in Handling and Storage Use good personal hygiene practice. Wash contaminated clothing and equipment before reuse.

Steps to be Taken in Case
Material is Released or Spilled Before attempting clean-up, refer to Hazard Data above. Use mop or wet vacuum to collect material for proper disposal. Rinse area with water.

Waste Disposal
Methods Dispose of this material in accordance with federal, state and local regulations.

AR200884

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user

IX SPECIAL PRECAUTIONS

PRECAUTIONARY STATEMENTS

CAUTION -FLAMMABLE MIXTURE. DO NOT USE NEAR FIRE OR FLAME.
DANGER: Extremely flammable. Keep away from heat, sparks and open flame. Contains petroleum distillates. Use with adequate ventilation. Avoid contact with the skin. Keep container closed when not in use. If swallowed, DO NOT INDUCE VOMITING, call a Physician. Keep out of the reach of children.

OTHER HANDLING AND STORAGE REQUIREMENTS

Store in a cool location.
Do not store with strong oxidants.

ADDITIONAL REGULATORY CONCERNS

FEDERAL:

FDA

USDA

CPSC

TSCA IS THIS PRODUCT, OR ALL ITS INGREDIENTS; BEING CERTIFIED FOR INCLUSION ON THE TOXIC SUBSTANCES CONTROL AC INVENTORY OF CHEMICAL SUBSTANCES? Yes

OTHER

STATE:

TLV (Threshold Limit Value) - 100 ppm for 8-hour workday, 40-hour week.

PREPARED BY John R. Mills

TITLE: Technical Consultant to

COMPANY: UNION RUBBER, INC.

ADDRESS: Trenton, New Jersey 08606

AR200885

J.T. Baker Co
222 Red School Lane
Phillipsburg, NJ 08865
201-859-2151
800-424-9300

PPE B

86184 -02 Butyl Acetate UN 1123 Page: 1
Effective: 08/28/86 Issued: 09/25/86

SECTION I - PRODUCT IDENTIFICATION

Product Name: Butyl Acetate
Formula: $CH_3COOCH_2CH_2CH_2CH_3$
Formula Wt.: 116.16
CAS No.: 00123-86-4
NIOSH/RTECS No.: AF7350000
Common Synonyms: n-Butyl Acetate; Butyl Ethanoate; Acetic Acid Butyl Ester
Product Codes: 9160,5365,9159,DA83,9191,9164,9161

PRECAUTIONARY LABELLING

BAKER SAF-T-DATA™ System

HEALTH	FLAMMABILITY	REACTIVITY	CONTACT
1	3	1	1
SLIGHT	SEVERE	SLIGHT	SLIGHT

Laboratory Protective Equipment

SAFETY GLASSES, LAB COAT, VENT HOOD, RUBBER GLOVES, EXTINGUISHER

RECEIVED
OCT 01 1986
C. MURAWCZYK

Precautionary Label Statements

WARNING!
FLAMMABLE
CAUSES IRRITATION
HARMFUL IF SWALLOWED OR INHALED

Keep away from heat, sparks, flame. Avoid contact with eyes, skin, clothing. Avoid breathing vapor. Keep in tightly closed container. Use with adequate ventilation. Wash thoroughly after handling. In case of fire, use alcohol foam, dry chemical, carbon dioxide - water may be ineffective. Flush spill area with water spray.

SECTION II - HAZARDOUS COMPONENTS

Component	%	CAS No.
Butyl Acetate	90-100	123-86-4

SECTION III - PHYSICAL DATA

Boiling Point: 126°C (259°F) Vapor Pressure(mmHg): 8

Continued on Page: 2

AR200886

0008

ORIGINAL (Red)

SECTION III - PHYSICAL DATA (Continued)

Melting Point: -75°C (-103°F) Vapor Density(air=1): 4

Specific Gravity: 0.88 (H_2O=1) Evaporation Rate: 5.8 (Butyl Acetate=1)

Solubility(H_2O): Slight (0.1 to 1 %) % Volatiles by Volume: 100

Appearance & Odor: Clear, nearly colorless liquid; characteristic fruity odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Closed Cup): 26°C (78°F) NFPA 704M Rating: 1-3-0

Flammable Limits: Upper - 7.6 % Lower - 1.7 %

Fire Extinguishing Media

Use alcohol foam, dry chemical or carbon dioxide. (Water may be ineffective.)

Special Fire-Fighting Procedures

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

Unusual Fire & Explosion Hazards

Vapors may flow along surfaces to distant ignition sources and flash back. Closed containers exposed to heat may explode. Contact with strong oxidizers may cause fire.

Toxic Gases Produced

carbon monoxide, carbon dioxide

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value (TLV/TWA): 710 mg/m^3 (150 ppm)

Short-Term Exposure Limit (STEL): 950 mg/m^3 (200 ppm)

Permissible Exposure Limit (PEL): 710 mg/m^3 (150 ppm)

Toxicity: LD_{50} (oral-rat)(g/kg) - 14

AR200887

Continued on Page: 3

SECTION V - HEALTH HAZARD DATA (Continued)

Carcinogenicity: NTP: No IARC: No Z List: No OSHA reg: No

Effects of Overexposure

Vapors are extremely irritating to skin, eyes, and mucous membranes. Inhalation of vapors may cause headache, nausea, vomiting, dizziness, drowsiness, irritation of respiratory tract, and loss of consciousness. Liquid may be irritating to skin, eyes, and mucous membranes. Prolonged exposure may cause dermatitis. Ingestion may cause nausea and vomiting.

Medical Conditions Generally Aggravated By Exposure

None Identified

Routes Of Entry

inhalation, ingestion, eye contact, skin contact

Emergency and First Aid Procedures

CALL A PHYSICIAN.
If swallowed, if conscious, immediately induce vomiting.
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Flush skin with water.

SECTION VI - REACTIVITY DATA

Stability: Stable Hazardous Polymerization: Will not occur

Conditions to Avoid: heat, flame, other sources of ignition

Incompatibles: strong oxidizing agents, strong acids, strong bases

Decomposition Products: carbon monoxide, carbon dioxide

SECTION VII - SPILL AND DISPOSAL PROCEDURES

Steps to be taken in the event of a spill or discharge

Wear suitable protective clothing. Shut off ignition sources; no flares, smoking, or flames in area. Stop leak if you can do so without risk. Use water spray to reduce vapors. Take up with sand or other non-combustible absorbent material and place into container for later disposal. Flush area with water.

AR200888

J. T. Baker Solusorb[R] solvent adsorbent is recommended for spills of this product.

Continued on Page: 4

SECTION VII - SPILL AND DISPOSAL PROCEDURES (Continued)

Disposal Procedure

Dispose in accordance with all applicable federal, state, and local environmental regulations.

EPA Hazardous Waste Number: D001 (Ignitable Waste)

SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT

Ventilation:	Use general or local exhaust ventilation to meet TLV requirements.
Respiratory Protection:	Respiratory protection required if airborne concentration exceeds TLV. At concentrations up to 1000 ppm, a chemical cartridge respirator with organic vapor cartridge is recommended. Above this level, a self-contained breathing apparatus is recommended.
Eye/Skin Protection:	Safety glasses with sideshields, rubber gloves are recommended.

SECTION IX - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA™ Storage Color Code: Red

Special Precautions

Bond and ground containers when transferring liquid. Keep container tightly closed. Store in a cool, dry, well-ventilated, flammable liquid storage area.

SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.)

Proper Shipping Name	Butyl acetate
Hazard Class	Flammable liquid
UN/NA	UN1123
Labels	FLAMMABLE LIQUID
Reportable Quantity	5000 LBS.

INTERNATIONAL (I.M.O.)

Proper Shipping Name	Butyl acetates
Hazard Class	3.2
UN/NA	UN1123
Labels	FLAMMABLE LIQUID

AR200889

Continued on Page: 5

N/A = Not Applicable or Not Available

The information published in this Material Safety Data Sheet has been compiled from our experience and data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions. We reserve the right to revise Material Safety Data Sheets periodically as new information becomes available.

AR200890

-- LAST PAGE --

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

ORIGINAL (Red)

MATERIAL SAFETY DATA SHEET

PPE B

UN NA

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I — C.F.R. IDENTIFICATION NO. NA-1133

MANUFACTURER'S NAME: Dennison Manufacturing Company, Dennison Carter's	EMERGENCY TELEPHONE NO.: (617) 879-0511 X4636
ADDRESS (Number, Street, City, State, and ZIP Code): 300 Howard St., Framingham, MA 01701	
CHEMICAL NAME AND SYNONYMS: N.A.	TRADE NAME AND SYNONYMS: Carter's Rubber Cement
CHEMICAL FAMILY: N.A.	FORMULA: N.A.

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS Naphthenes	10	160 PPM	FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES Paraffins	90				
OTHERS *Aromatics	0		OTHERS		

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Natural Rubber - CAS #9006-04-6		
Antioxidant - CAS #119-47-1		
Rubber Solvent - CAS #64742-89-8		
Isopropanol - CAS #67-63-0		
* Benzene Content - Non detected at 1 part per million.		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.) Lab - Dry Pt. (140-224°F)	60-107°C	SPECIFIC GRAVITY (H_2O=1) @ 25°F	0.72
VAPOR PRESSURE (mm Hg.) Est. @ 37.78°C	200	PERCENT, VOLATILE BY VOLUME (%)	87
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (Bu. Ac. =1) Est.	10
SOLUBILITY IN WATER	Negligible	Autoignition	500°F
APPEARANCE AND ODOR	Buff Color liquid with hydrocarbon odor.		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 0°F	FLAMMABLE LIMITS Est.	Lel 1.1	Uel 6.0

EXTINGUISHING MEDIA: CO_2 -Foam - Dry Chemical, Water fog or spray

SPECIAL FIRE FIGHTING PROCEDURES: Use air supplied breathing equipment for enclosed areas. Cool exposed containers with water spray.

AR200891

UNUSUAL FIRE AND EXPLOSION HAZARDS: Do not mix or store with strong oxidants oxygen.

(Continued on reverse side)

Form OSHA-20
Rev. May 72

ORIGINAL (Red)

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
See Sec. II - Recommended exposure limit is 100 PPM for 8 hrs. work day.

EFFECTS OF OVEREXPOSURE
Eye irritation, drying of skin, excessive inhalation causes headache, dizziness and nausea.

EMERGENCY AND FIRST AID PROCEDURES
Eye contact: Flush with water; Call a Physician. Inhalation: Remove to fresh air and restore breathing; Call a Physician. Skin contact: Wash with soap and water.

SECTION VI - REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	x	Heat, sparks, open flame

INCOMPATABILITY *(Materials to avoid)*
Strong oxidant like liquid chlorine.

HAZARDOUS DECOMPOSITION PRODUCTS
Fumes, smoke and carbon monoxide in the case of complete combustion.

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	x	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Avoid open flames or spark sources. Provide adequate ventilation. Add absorbent (sawdust, sand etc.) to spill area. Read product container.

WASTE DISPOSAL METHOD
Evaporate and peel residue from surface. Treat as hydrocarbon solvent.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*

VENTILATION		
	LOCAL EXHAUST	SPECIAL Use with adequate ventilation.
	MECHANICAL *(General)* Explosion proof equipment.	OTHER No smoking

PROTECTIVE GLOVES	EYE PROTECTION
* Yes	* Yes

OTHER PROTECTIVE EQUIPMENT

*Use discretion when small quantities are being used.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Avoid open flames spark sources, splash filling, excessive heat. Keep containers closed when not in use.

OTHER PRECAUTIONS
Carefully read all directions and cautions on product container.

AR200892

NOTICE FROM DENNISON MFG. CO.

To the best of our knowledge this information is accurate: however, we do [illegible] guarantee its accuracy and [illegible] consequential or actual [illegible] any reliance thereon.

Form OSHA-20
Rev. May 72

MATERIAL SAFETY AND HEALTH DATA SHEET

Essentially similar to form LSB-OOS-4 (U.S. Department of Labor)

rhône-poulenc inc.

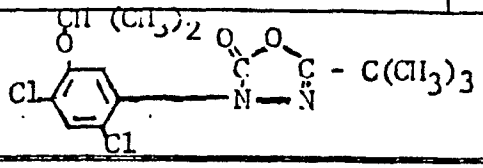
ORIGINAL (RED)

Section 1 NAME & PRODUCT

(a)	Rhone-Poulenc, Inc.	EMERGENCY PHONE NO. 24 HOURS (b)	800-424-9300
STREET ADDRESS (c)	120 Jersey Avenue	DATE (d)	8/4/81
CITY, STATE, ZIP CODE (e)	New Brunswick, New Jersey 08903		
CHEMICAL NAME TRADE NAME AND SYNONYMS (f)	Chipco Ronstar® G; Oxadiazon		

FORMULA OF PRIMARY COMPONENT(S) (STRUCTURAL)

(g) $C_{15}H_{18}Cl_2N_2O_3$



Section 2 INGREDIENTS

	%
Oxadiazon	98
Inert Ingredients	2

Section 3 PHYSICAL DATA

2	BOILING POINT (°F)	NA	6 SPECIFIC GRAVITY (H_2O = 1)	37 lbs/cu. ft.
3	VAPOR PRESSURE (mmHg at 20°C)	NA	7 % VOLATILE BY VOLUME	------
4	VAPOR DENSITY (air = 1)	NA	8 COLOR AND ODOR	Grey-white; slight odor
5	SOLUBILITY IN WATER	Insoluble	9 PHYSICAL STATE	Flowable solid

Section 4 FIRE AND EXPLOSION HAZARD DATA

10 FLASH POINT (AND METHOD USED): NA °F ----

11 FLAMMABLE LIMITS STP: L.F.L. ---- U.F.L. ----

12 EXTINGUISHING MEDIA: NA ☐ WATER FOG ☐ FOAM ☐ ALCOHOL FOAM ☐ CO_2 ☐ DRY CHEMICAL ☐ OTHER

13 SPECIAL FIRE FIGHTING PROTECTIVE EQUIPMENT

Self-contained breathing apparatus

14 UNUSUAL FIRE AND EXPLOSION HAZARDS

None

Section 5 REACTIVITY DATA

15 STABILITY: NORMAL CONDITIONS [X] FIRE CONDITIONS [ ]

16 CONDITIONS TO AVOID: Stable

17 INCOMPATIBILITY (Materials to avoid): ☐ WATER ☐ ACID ☒ BASE ☐ CORROSIVE ☐ OXIDIZING MATERIAL ☐ OTHER

18 HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen chloride and nitrogen oxides may be emitted on combustion.

19 HAZARDOUS POLYMERIZATION: MAY OCCUR [ ] WILL NOT OCCUR [X]

20 CONDITIONS TO AVOID

AR200893

(FRONT)

RA 79-10'78

MATERIAL SAFETY AND HEALTH DATA SHEET (cont.)

rhône-poulenc inc.

ORIGINAL

Section 6 HEALTH HAZARD DATA

21 ORAL INGESTION: A.O. (rat) LD_{50}: > 30,000 mg/kg

22 EYE CONTACT: Mild eye irritant when NOT followed by water washout; not irritant when eye

23 SKIN CONTACT: A.D. (rabbit) LD_{50}: > 10,000 mg/kg are immediately wash

24 SKIN ABSORPTION: -----

25 INHALATION (TLV OR SUGGESTED CONTROL FIGURE): TLV not established; LC_{50}: 200 mg/l of air

26 EFFECTS FROM INHALATION OVER EXPOSURE: -----

27 FIRST AID PROCEDURES

EYE: Wash immediately with large volume of water and call a physician

SKIN: Wash with soap and a large volume of water.

INHALATION: Remove from area of exposure.

INGESTION: Induce vomiting and call a physician.

Section 7 SPILL OR LEAK PROCEDURES

28 STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb with vermiculite and sweep up into steel drum.

29 DISPOSAL METHOD: Bury in an approved chemical landfill away from open or underground water. Follow local, state, and federal regulations.

Section 8 SPECIAL PROTECTION INFORMATION

VENTILATION: Provide adequate ventilation.

31 RESPIRATORY PROTECTION (SPECIFY TYPE): Use NIOSH/MSHA approved air purifying respirator with appropriate cartridge

32 PROTECTIVE CLOTHING: Work uniform, gloves

33 EYE PROTECTION

- [ ] NOT NORMALLY NECESSARY
- [ ] SAFETY GLASSES WITHOUT SIDE SHIELDS
- [ ] SAFETY GLASSES WITH SIDE SHIELDS
- [x] CHEMICAL WORKERS GOGGLES
- [ ] GAS TIGHT GOGGLES, OR EQUIVALENT
- [ ] OTHER:

4 OTHER PROTECTIVE EQUIPMENT: Provide eye wash fountain and safety shower facilities in the work area.

Section 9 SPECIAL PRECAUTIONS OR OTHER COMMENTS

5 PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Avoid contact with eyes, skin and clothing. Do not store with other pesticides, foodstuffs, or seeds. Open dumping is prohibited.

OTHER PRECAUTIONS: Do not eat, drink, or smoke in the work area. Keep out of reach of children. Avoid contamination of local water supply, ponds, or streams. Do not allow spray drift to contact desirable plants. Containers may be disposed of in a chemical landfill approved for pesticide containers after thorough rinsing. Do not [illegible] be drank in treated areas.

AP20009

MATERIAL SAFETY AND HEALTH DATA SHEET 5/3/85

Essentially similar to form LSB-OOS-4 (U.S. Department of Labor)

rhône-poulenc inc

ORIGINAL

Section 1 NAME & PRODUCT

(a) Rhone-Poulenc, Inc.

EMERGENCY PHONE NO. 24 HOURS (b) 800-424-9300

STREET ADDRESS (c) PO Box 125, Black Horse Lane

DATE (d) 1/8/82 (R)

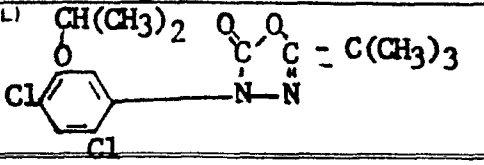
CITY, STATE, ZIP CODE (e) Monmouth Junction, NJ 08852

CHEMICAL NAME TRADE NAME, AND SYNONYMS

(f) Chipco Ronstar G; Oxadiazon formulated granular

FORMULA OF PRIMARY COMPONENT(S) (STRUCTURAL)

(g) $C_{15}H_{18}Cl_2N_2O_3$



Section 2 INGREDIENTS

	%
[19666-30-9] Oxadiazon	2
Inert ingredients	98

Section 3 PHYSICAL DATA

2 BOILING POINT (°F.)	NA	6 Bulk Density	37 pounds/cu.ft.
3 VAPOR PRESSURE (mmHg at 20°C)	NA	7 % VOLATILE BY VOLUME	NA
4 VAPOR DENSITY (air = 1)	NA	8 COLOR AND ODOR	Grey-white;slight odor
5 SOLUBILITY IN WATER	Insoluble	9 PHYSICAL STATE	Flowable solid

Section 4 FIRE AND EXPLOSION HAZARD DATA

10 FLASH POINT (AND METHOD USED) NA °F

11 FLAMMABLE L M TS STP L.F.L. NA U.F.L. NA

12 EXTINGUISHING MEDIA: [X] WATER FOG [X] FOAM [ ] ALCOHOL FOAM [X] CO_2 [X] DRY CHEMICAL [ ] OTHER

13 SPECIAL FIRE FIGHTING PROTECTIVE EQUIPMENT

Use self-contained breathing apparatus.

14 UNUSUAL FIRE AND EXPLOSION HAZARDS

None

Section 5 REACTIVITY DATA

15 STABILITY: NORMAL CONDITIONS [X] FIRE CONDITIONS [ ]

16 CONDITIONS TO AVOID: Stable

17 INCOMPATIBILITY (Materials to avoid): [ ] WATER [ ] ACID [X] BASE [ ] CORROSIVE [ ] OXIDIZING MATERIAL [ ] OTHER:

18 HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen chloride, nitrogen oxides, and carbon oxides may be emitted on combustion.

AR200895

19 HAZARDOUS POLYMERIZATION: MAY OCCUR [ ] WILL NOT OCCUR [XX]

20 CONDITIONS TO AVOID: Not Applicable

(FRONT)

RA-79-10/78

MATERIAL SAFETY AND HEALTH DATA SHEET (cont.)

rhône-poulenc inc

ORIGINAL (Red)

Section 6 HEALTH HAZARD DATA

21 ORAL INGESTION: Acute oral (rat) LD_{50}: > 30,000 mg/kg

22 EYE CONTACT: Mild eye irritant when NOT followed by water rinsing. No irritation when e

23 SKIN CONTACT: Acute dermal (rabbit) LD_{50}: >10,000 mg/kg

24 SKIN ABSORPTION: NA

25 INHALATION (TLV OR SUGGESTED CONTROL FIGURE): TLV not established LC_{50}: >200 mg/l air

26 EFFECTS FROM INHALATION OVER EXPOSURE: NA

27. FIRST AID PROCEDURES

EYE: Flush eyes thoroughly with large volume of water. Seek medical assistance as necessary, especially if irritation develops or persists.

SKIN: Wash with soap and a large volume of water. Seek medical assistance as necessary, especially if irritation develops or persists.

INHALATION: Remove from area of exposure. Seek medical assistance as necessary.

INGESTION: Induce vomiting. Seek medical assistance as necessary.

Section 7 SPILL OR LEAK PROCEDURES

28 STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Sweep up into a steel drum. Use vermiculite during clean-up if necessary.

29 DISPOSAL METHOD: Dispose of in accordance with Local, State and Federal regulations.

Section 8 SPECIAL PROTECTION INFORMATION

30 VENTILATION: Provide adequate ventilation. Use local exhaust fans as necessary, especiall when using in a closed area.

31 RESPIRATORY PROTECTION (SPECIFY TYPE): Use NIOSH/MSHA approved air purifying respirator with appropriate cartridge

32 PROTECTIVE CLOTHING: Work uniform, gloves

33 EYE PROTECTION

- [ ] NOT NORMALLY NECESSARY
- [ ] SAFETY GLASSES WITHOUT SIDE SHIELDS
- [ ] SAFETY GLASSES WITH SIDE SHIELDS
- [x] CHEMICAL WORKERS GOGGLES
- [ ] GAS TIGHT GOGGLES OR EQUIVALENT
- [ ] OTHER:

34 OTHER PROTECTIVE EQUIPMENT: Provide eye wash fountain and safety shower in the work area.

Section 9 SPECIAL PRECAUTIONS OR OTHER COMMENTS

35 PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in a cool, dry place in tightly closed containers. Avoid breathing dusts. Avoid direct or prolonged contact with skin and eyes. Wash hands thoroughly after handling. Do not eat, drink, or smoke in the work area. KEEP OUT OF

AR200896

36 OTHER PRECAUTIONS: REACH OF CHILDREN AND ANIMALS. READ LABEL CAREFULLY BEFORE USE. Avoid contaminating water sources. Do not allow spray drift to contact desirable plants. Do not re-use containers. Do not graze animals on treated animals. Open dumping is prohibited.

The information herein is given in good faith but no warranty, express or implied, is made

Activ VIII . Non-butyl Cleaner .08

Bullen Trade Name | Type Product | Code

ORIGINAL

PREPARED BY BULLEN CHEMICAL CO., DELMAR DR., BOX 37, FOLCROFT, PA 19032 • EMERGENCY PHONE 215/724-8100

MATERIAL SAFETY DATA SHEET (BULLEN CHEMICAL)

(Prepared According to 29 CFR 1910. 1200)

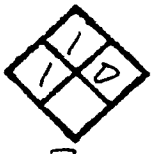
Date Prepared 12/13/85 pcg

SECTION 1 - PRODUCT IDENTIFICATION

Distributor Name: ZIMMERMAN	Emergency Telephone No.
Address	
Trade Name: COMPLEX 66 DEGREASER	Product Type

SECTION 2 - HAZARDOUS INGREDIENTS

CHEMICAL NAME/COMMON NAME	CAS NO.	PERCENT (optional)	TLV (Source)
Sodium metasilicate	6834-92-0		Not established



PPE B

UN 1142

Other Ingredients in Product are: [X] Less than 1% by Weight or Less than 0.1% for Carcinogens [X] Not Hazardous [X] Declared to be Trade Secrets

SECTION 3 - PHYSICAL DATA

Boiling Point (°F) 212		Specific Gravity (H_2O = 1.0) 1.060 ±0.005	pH 12.5 ±0.5
Vapor Pressure (mmHg) Not known		Vapor Density (Air = 1) Not known	

Solubility in Water: [x] Complete [ ] Insoluble [ ] Emulsifiable (or dispersible) [ ] Slight (or partial)

Evaporation Rate (vs H_2O): [ ] Faster [ ] Slower [x] About the Same

Appearance and Odor: Liquid, practically odorless

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (TCC)	[x] None to Boiling	Flammable Limits	Upper Unknown	Lower Unknown

Extinguishing Media: CO_2, dry chemical, foam, water spray.

Special Fire Fighting Procedures: None known

RECEIVED SEP 26 1986 C. MURAWOSKI

Unusual Fire and Explosion Hazards: None known

AR200897

SECTION 5 - REACTIVITY DATA

[x] Stable [ ] Unstable

Incompatibility: Strong oxidizers, anionic compounds

Hazardous Decomposition Products: Carbon monoxide and other unidentified organic compounds may be formed during incomplete combustion.

ORIGINAL

SECTION 6 - HEALTH HAZARDS

Threshold Limit Value - Product (See Section 2 for Ingredient TLV) [x] None Established [ ] Not Applicable Source (Med)

Primary Routes of Exposure [x] Eye [x] Skin [x] Oral [ ] Inhalation [ ] Other

Signs and Symptoms of Overexposure (Acute) Eyes: redness, irritation. Skin: redness, irritation. Swallowing: may irritate mucous membranes. Possible vomiting or nausea may occur.

Signs and Symptoms of Overexposure (Chronic)

Not known

Medical Conditions Aggravated by Overexposure

Not known

Carcinogen or Suspect Carcinogen Ingredients [ ] NTP [ ] IARC [ ] OSHA [x] None

SECTION 7 - EMERGENCY AND FIRST AID PROCEDURES IN CASE OF OVEREXPOSURE

Eyes Flush immediately with water for at least 15 minutes. If persistent irritation occurs, call a physician.

Skin

Wash thoroughly with soap and water.

Ingestion

Induce vomiting

Inhalation

N/A

SECTION 8 - SPECIAL PROTECTION INFORMATION

Respiratory Protection Not needed under normal conditions.

Ventilation Requirements [ ] Local Exhaust [x] Mechanical [ ] Other

Protective Gloves Rubber

Eye Protection Safety glasses or goggles

Other Protective Clothing

May be needed if splashing occurs

SECTION 9 - SPILL OR LEAK PROCEDURES

Steps to be Taken if Released or Spilled Flush spill area with water. For large spills, contain and collect for disposal.

Waste Disposal Methods Dispose of in accordance with applicable federal, state and local regulations.

AR200898

SECTION 10 - STORAGE AND HANDLING INFORMATION

Precautions to be Taken in Handling and Storage

Avoid contact with skin, eyes and clothing.

ORIGINAL (Red)

MATERIAL SAFETY DATA SHEET

PRODUCT NAME CRC 5-56 (Bulk) #5007,5009, 5011	# MSDS005007
MANUFACTURED BY: CRC CHEMICALS	Phone (215) 674-4300
885 LOUIS DRIVE, WARMINSTER, PA. 18974	

1. INGREDIENTS

	CAS #	ACGIH TLV	OSHA PEL	Other Limits	%
Petroleum Distillate	64742-47-8	NA	NA	200ppm (Est.)	70
*Inhibited Paraffinic Oil	NA		For Mist 5 mg/M3		30

*The oil and additives are not hazardous according to OSHA standards - Additives are primarily fatty acids and fatty acid esters.

PPG C

UN 1268

2. PHYSICAL DATA

Specific Gravity .8167	Vapor Pressure 0.23 mm	% Volatile 70
Boiling Point 380°F (initial)	Evaporation Rate Slow 0.01 (Toluene = 1)	
Freezing Point NA	Vapor Density Heavier than air	

Appearance and Odor Amber liquid, pleasant odor

Solubility Negligible in water - Dissolves in most organic solvents.

3. FIRE AND EXPLOSION DATA

Flashpoint 175°F Method COC	Flammable Limits	
Extinguishing Media CO_2, Dry Chemical or Foam	LEL NA	UEL NA

Unusual Hazards Treat as typical oil fire

4. REACTIVITY AND STABILITY

Stability Stable

Hazardous decomposition products CO_2 & Carbon monoxide (Fire)

Materials to avoid Strong oxidizing agents

5. PROTECTION INFORMATION

Ventilation Adequate ventilation to maintain oil mist below PEL if sprayed.

Respiratory Use NIOSH approved respirators for high mist concentration

AR200899

Gloves Solvent resistant	Eye & Face Safety glasses

Other Protective Equipment Oil resistant aprons, boots, etc. should be worn if other parts of body are subject to exposure

ORIGINAL (Red)

6. HEALTH HAZARD DATA

Primary Routes of Entry Skin, Inhalation

Signs and Symptoms of Exposure

1. Acute Overexposure May cause burning and irritation of eyes. Skin contact will cause dryness. Inhalation of mist may cause breathing problems. Vapors may also cause headaches and nausea.

2. Chronic Overexposure Prolonged exposure to skin may cause development of dermatitus.

Medical Conditions Generally Aggravated by Exposure NA

Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Program	Yes ☐ No ☒	IARC Monographs	Yes ☐ No ☒	OSHA	Yes ☐ No ☒

Emergency and First Aid Procedures (If symptoms persist, call a physician)

1. Inhalation Remove to fresh air - apply artificial respiration if needed.
2. Eyes Flush for 15 minutes with large amounts of water.
3. Skin Remove contaminated clothing. Wash exposed skin with soap & water.
4. Ingestion Do not induce vomiting - Call a doctor.

7. SPILL OR LEAK PROCEDURES

Precautions to be taken in Handling and Storage Store in a cool dry area.

Steps to be taken in case Materials is released or spilled Ventilate area, remove any source of ignition. Dike area and absorb with sand or other absorbant. Scrape up and place in drums.

Waste Disposal Comply with federal, state and local regulations for oil waste material.

8. SPECIAL PRECAUTIONS AND USE DIRECTIONS

Keep containers closed when not in use. Spills should be kept out of streams or water supply.

AR200900

PREPARED BY: A. B. Reed

ORIGINAL DATE OR DATE OF REVISION November 1985

NOTICE: JUDGEMENT BASED ON INDIRECT TEST DATA.

AEROSOL MATERIAL SAFETY DATA SHEET

(ESSENTIALLY SIMILAR TO FORM OSHA-20)

2 D O

B

UN 1142

Chemi-cap

Zimmerman Inc.

EMERGENCY PHONE (305) 974-5440

DYNA SOLV AEROSOL

ORIGINAL (Red)

A88 All Purpose Cleaner 7609

QUICK PRODUCT IDENTIFIER (IN PLANT COMMON NAME)

CHEMICAL PACKAGING CORPORATION.
P.O. BOX 9947, FT. LAUDERDALE, FL 33310

I — IDENTIFICATION

[redacted]

SIGNATURE OF PERSON RESPONSIBLE FOR PREPARATION: M. Smith

DATE PREPARED: 12-11-85

PACKAGE TYPE: Aerosol Container

FORMULA: Proprietary Mixture

TRADE NAME: All Purpose Cleaner

II — HAZARDOUS INGREDIENTS

PRINCIPAL HAZARDOUS COMPONENT(s) (CHEMICAL NAME(S))	CAS#	APPROX. %(wt)	TLV (ppm)
Butyl Cellosolve	111-76-2		50
Sodium Metasilicate			
Trisodium Phosphate	7601-54-9		
Octylphenol Polyethoxylate	9002-93-1		
PROPELLANT Propane/Butane	74-98-6/75-28-5		1000

RECEIVED

C. MURAWCZYK

III — PHYSICAL DATA

BOILING POINT (°F) OF CONCENTRATE	N.D.	SPECIFIC GRAVITY (H_2O = 1) @75°F OF CONCENTRATE	1.036
VAPOR PRESSURE (psig) IN CAN @ 75°F	63	% VOLATILE BY VOLUME IN CAN	93
VAPOR DENSITY	N.D.	FLASH POINT OF CONCENTRATE	150 F T.O.C.
SOLUBILITY IN WATER OF CONCENTRATE	Complete	APPEARANCE AND ODOR OF SPRAY	Clear Water White liquid perfume odor

IV — FIRE & EXPLOSION HAZARD DATA

FLAMMABILITY as per CPSC FLAME EXTENSION TEST: Non-flammable

FLAMMABLE LIMITS: Lower N/A; Upper N/A

EXTINGUISHING MEDIA: Water, Foam, Dry Chemical, Carbon Dioxide

SPECIAL FIRE FIGHTING PROCEDURES

KEEP CONTAINERS COOL. USE EQUIPMENT OR SHIELDING REQUIRED TO PROTECT PERSONNEL AGAINST BURSTING, RUPTURING OR VENTING CONTAINERS.

UNUSUAL FIRE & EXPLOSION HAZARDS

AT ELEVATED TEMPERATURES (ABOVE 120°F) CONTAINERS MAY VENT, RUPTURE OR BURST.

V — REACTIVITY DATA

CHEMICAL STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	XX	Do not store at temp. above 120 F

INCOMPATABILITY (Materials to avoid): None

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce carbon monoxide and/or carbon dioxide

AR200901

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	XX	None

AEROSOL PRODUCTS PRESENT A [illegible] CAUTIONS ARE FOLLOWED. INTENTIONAL MIS-USE BY DELIBER[illegible]LY CO[illegible]ENTRATING AND INHALING THE CONTENTS CAN BE HARMFUL, OR FATAL. PRESSURIZED CONTAINERS MUST NOT BE EXPOSED TO TEMPERATURES ABOVE 120°F AND SPRAY SHOULD NOT BE DIRECTED TOWARD FACE OR EYES, OPEN FLAME OR OTHER SOURCE OF IGNITION.

VI— HEALTH HAZARD DATA

OSHA PERMISSIBLE EXPOSURE LIMIT	THRESHOLD LIMIT VALUE
N.D.	~~See Section~~

EFFECTS OF OVER EXPOSURE

INHALATION:
Product exist as foam. Inhalation will cause strangulation.

SKIN CONTACT/ABSORPTION:
No evidence of adverse effect from available information.

ORIGINAL (Red)

INGESTION:
Can cause gastrointestinal irritation, vomiting and diahrrea

EYES.
Minor irritation

EMERGENCY AND FIRST AID PROCEDURES

EYES AND SKIN: Flush with water for at least 15 minutes

INHALATION: Treat for strangulation

INGESTION: Do not induce vomiting, get medical attention

VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE CONTAINER IS PUNCTURED AND MATERIAL IS RELEASED.
Clean up area by mopping or with absorbent materials and place in containers for disposal. Consult Federal, Local and State authorities for approved disposal procedures

WASTE DISPOSAL METHOD

WHEN USED PROPERLY AEROSOL PRODUCTS DO NOT GENERATE HAZARDOUS WASTE. EMPTY DE-PRESSURIZED CONTAINERS CAN NOT BE REUSED AND SHOULD BE WRAPPED AND PUT IN TRASH COLLECTION. CANS WHICH ARE PRESSURIZED OR CONTAIN LIQUID MUST BE DISPOSED OF IN A PERMITTED WASTE MANAGEMENT FACILITY. CONSULT FEDERAL, STATE AND LOCAL DISPOSAL AUTHORITIES FOR APPROVED PROCEDURES.

VII — SPECIAL PROTECTION INFORMATION

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: Under normal conditions no respiratory protection is required

EYE: None required, chemical splash goggles may be worn

SKIN: None required, protective gloves may be worn

OTHER: Normal ventilation adequate

VENTILATION REQUIREMENTS

IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Do not store at temperatures above 120 F.

SPECIAL PRECAUTIONARY STATEMENTS

PLEASE READ AND FOLLOW THE DIRECTIONS ON THE PRODUCT LABEL; THEY ARE YOUR BEST GUIDE TO USING THIS PRODUCT IN THE MOST EFFECTIVE WAY, AND GIVE THE NECESSARY SAFETY PRECAUTIONS TO PROTECT YOUR HEALTH.

AR200902

NOTICE: WE BELIEVE THAT THE INFORMATION CONTAINED ON THIS MATERIAL SAFETY DATA SHEET IS ACCURATE. THE SUGGESTED PROCEDURES ARE BASED ON EXPERIENCE AS OF THE DATE OF PUBLICATION. THEY ARE NOT NECESSARILY ALL-INCLUSIVE NOR FULLY ADEQUATE IN EVERY CIRCUMSTANCE. ALSO, THE SUGGESTIONS SHOULD NOT BE CONFUSED WITH NOR FOLLOWED IN VIOLATION OF APPLICABLE LAWS, REGULATIONS, RULES OR INSURANCE REQUIREMENTS.
NO WARRANTY, [illegible]SS OR I[illegible]ED, OF MERCHANTABILITY, FITNESS OR OTHERWISE IS MADE.

MATERIAL SAFETY DATA SHEET

SANFORD CORPORATION
2740 WASHINGTON BLVD.
BELLWOOD, IL. 60104

EMERGENCY TELEPHONE NUMBER: 312 547-6650

LATEST REVISION DATE: March, 1986

PPE B

UN 1142

SECTION I PRODUCT IDENTIFICATION

SANFORD PRODUCT NAME: Expo White Board Cleaner

INK NAME: Expo Cleaner

CHEMICAL FAMILY: Mixture

FORMULA: Proprietary

RECEIVED
AUG 4 1986
C. MURAWCZYK

SECTION II INGREDIENTS

INGREDIENT	PERCENT BY WEIGHT
Water	40 - 70
Isopropanol	10 - 40
Ethylene glycol monobutyl ether	10 - 40

SECTION III PHYSICAL DATA

BOILING POINT (°F): 180 - 343

VAPOR PRESSURE (mmHg): 33 at 20°C for isopropanol

VAPOR DENSITY (Air = 1): 1.0 - 4.1

SPECIFIC GRAVITY: 0.95 - 0.96

PERCENT VOLATILE BY VOLUME: 100

EVAPORATION RATE: Not available

SOLUBILITY IN WATER: Infinite

APPEARANCE AND ODOR: Clear liquid, mild odor

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): 105°F (TCC)

LOWER EXPLOSION LIMIT: 2.5% for isopropanol

UPPER EXPLOSION LIMIT: Not available

EXTINGUISHING MEDIA: Alcohol foam, dry chemical, carbon dioxide

SPECIAL FIRE FIGHTING PROCEDURE: Self-contained breathing apparatus with a full face-piece operated in pressure-demand or other positive pressure mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Heavier than air vapors which may be ignited by remote ignition sources.

SECTION V HAZARDOUS INGREDIENTS

INGREDIENT	CAS #	PERCENT BY WEIGHT	EXPOSURE LIMIT
Isopropanol	67-63-0	10 - 40	PEL 400 ppm; TLV 400 ppm
Ethylene glycol monobutyl ether	11-76-2	10 - 40	PEL 50 ppm; TLV 25 ppm skin

SECTION VI HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Not determined; Oral LD_{50} (rats) greater than 5.0 g/kg

EFFECTS OF OVEREXPOSURE: (Not established but inferred from information supplied for each of the ingredients.)

EYE: Severe irritation, redness, tearing, blurred vision.

SKIN: Moderate irritation, defatting, dermatitis.

INHALATION: Excessive inhalation can cause nasal and respiratory irritation, dizziness, nausea, headache.

INGESTION: Gastrointestinal irritation, nausea, vomiting, and diarrhea.

SECTION VII FIRST AID AND EMERGENCY PROCEDURES FOR OVEREXPOSURE (Based on informatio supplied for various ingredients.)

EYE CONTACT: Flush with large amounts of water. Get medical attention.

SKIN CONTACT: Thoroughly wash with soap and water. Remove and launder contaminate clothing.

INHALATION: If affected, remove to fresh air. Get medical attention if symptoms persist.

INGESTION: Give conscious patient two glasses of water and induce vomiting. Ge medical attention.

SECTION VIII REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY: Stable

INCOMPATABILITY: Avoid strong oxidizing agents.

HAZARDOUS REACTIONS AND DECOMPOSITIONS PRODUCTS: None

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: Cannot occur

SECTION IX SPILL OR LEAK PROCEDURES

SPILL OR LEAK PROCEDURES: Absorb in paper or absorbent material and transfer to hoc

WASTE DISPOSAL PROCEDURES: Dry in hood and dispose of absorbent material as solid water.

SECTION X PERSONAL PROTECTION

EYE PROTECTION: OSHA approved goggles for splash protection.

SKIN PROTECTION: As needed to prevent prolonges skin contact.

RESPIRATORY PROTECTION: If TLV's exceeded use NIOSH/MSHA jointly approved air supplied respirator.

VENTILATION: Local or general to keep exposure below recommended levels.

AR200905

XEROX

Material Safety Data Sheet

MSDS No.: 0232
Date: Oct. 3, 1984
Revision: Sept. 19, 1985 ORIGINAL

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Black Developer Part No. : 5R142

Chemical Name: None

Ingredients	CAS No.
Carrier (>95%):	
Ferrite Powder	----------
Toner (<5%):	
Styrene, Acrylate Copolymer (60-65%)	25213-39-2
Acrylic Resin (20-25%)	----------
Carbon Black (10-15%)	7440-44-0
Polylefin (<10%)	----------
Amorphous Silica (<1%)	7631-86-9

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >6,6 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: non-sensitizing, non-irritating
Mutagenicity: No mutagenicity detected in Ames, Pol A + /A-, WP2 and Micronucleus Assays.
Aquatic LC_{50}: >500 mg/l (fathead Minnows) non-toxic

TLV: 10 mg/m³ (Total Dust)
5 mg/m³ (Respirable Dust)

PEL: 15 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

[1]XEL: 5 mg/m³ (Total Dust)

AR200906

Additional Information: The information noted above is toxicity data for toner.
*Not tested to the highest dose or concentration.

[1]XEL - Xerox Exposure Limit

N A. - Not Applicable

Trade Name: 1025/1038 Black Developer

MSDS No.: 0232

Section IV - Physical Data

Appearance/Odor: Black Granular / faint odor
Boiling Point: N.A.
Solubility in Water: N.A.
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H_2O = 1): N.A.
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: If spilled, sweep up or vacuum.

Waste Disposal Method: No special disposal procedures. Insure conformity with federal, state or local regulations.

AR200907

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A.
ID Number: N. A.

XEROX

Material Safety Data Sheet

MSDS No.: 0234
Date: Oct. 9, 1984
Revision: Sept. 19, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Blue Developer Part No. : 5R144

Chemical Name: None

Ingredients	CAS No.
Carrier (>90%):	
Ferrite Powder	----------
Toner (<10%):	
Styrene, Acrylate Copolymer (45-50%)	25213-39-2
Acrylic Resin (30-40%)	----------
Blue Pigment; Phthalocyanine Derivative (<10%)	----------
Polyolefin (<5%)	----------
Tin Oxides (<5%)	----------
Magenta Pigment; Quinoacridine Derivative (<2%)	----------
Amorphous Silica (<2%)	7631-86-9

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >6.6 mg/1 (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-sensitizing, non-irritating
Mutagenicity: No mutagenicity detected in Ames and Micronucleus Assays.
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m³ (Total Dust)
5 mg/m³ (Respirable Dust)

PEL: 15 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

[1]XEL: 5 mg/m³ (Total Dust)

AR200908

Additional Information: The information noted above is based on toxicity data for 6500 and 2830 Toners. *Not tested to the highest dose or concentration.

[1]XEL - Xerox Exposure Limit

N.A. - Not Applicable

Trade Name: 1025/1038 Blue Developer

MSDS No.: 0234

Section IV - Physical Data

Appearance/Odor: Blue granular / faint odor
Boiling Point: N.A.
Solubility in Water: Negligible
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: 85°C to 100°C
Melting Point: N.A.
Specific Gravity (H_2O = 1): 1
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: If spilled, sweep up or vacuum.

Waste Disposal Method: No special disposal procedures. Insure conformity with federal, state or local regulations.

Section X - Transportation Information

AR200909

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A.
ID Number: N. A.

XEROX

Material Safety Data Sheet

MSDS No.: 0236
Date: Apr. 12, 1985
Revision: Sept. 19, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

ORIGINAL

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Brown Developer Part No. : 5R146

Chemical Name: None

Ingredients	CAS No.
Carrier (>90%):	
Ferrite Powder (>99%)	----------
Toner (<10%):	
Styrene, Acrylate Copolymer (45-50%)	25213-39-2
Acrylic Resin (30-35%	----------
Yellow Pigment: Acetylacetamide Derivative (<10%)	----------
Magenta Pigment; Quinoacridine Derivative (<5%)	----------
Polyolefin (<5%)	----------
Tin Oxides (<5%)	----------
Amorphous Silica (<1%)	7631-86-9

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: No mutagenicity detected in Ames and Micronucleus Assays.
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m³ (Total Dust)
5 mg/m³ (Respirable Dust)

PEL: 15 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

[1]XEL: 5 mg/m³ (Total Dust)

AR200910

Additional Information: The information noted above is based on toxicity data for 6500 and 2830 Toners. *Not tested to the highest dose or concentration.

[1]XEL - Xerox Exposure Limit

N.A. - Not Applicable

Trade Name: 1025/1038 Brown Developer

MSDS No.: 0236

Section IV - Physical Data

Appearance/Odor: Brown granular / faint odor
Boiling Point: N.A.
Solubility in Water: N.A.
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H_2O = 1): N.A.
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: If spilled, sweep up or vacuum.

Waste Disposal Method: No special disposal procedures. Insure conformity with federal, state or local regulations.

AR200911

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A.
ID Number: N. A.

XEROX

Material Safety Data Sheet

MSDS No.: 0235
Date: Oct. 9, 1984
Revision: Sept. 19, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Green Developer Part No. : 5R145

Chemical Name: None

Ingredients	CAS No.
Carrier (>90%):	
Ferrite Powder	----------
Toner (<10%)	
Styrene, Acrylate Copolymer (60-65%)	25213-39-2
Acrylic Resin (20-25%)	----------
Polyolefin (<10%)	----------
Blue Pigment; Phthalocyanine Derivative (<5%)	----------
Yellow Pigment; Acetylacetamide Derivative (<5%)	----------
Amorphous Silica (<1%)	7831-86-7

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: No mutagenicity detected in Ames and Micronucleus Assays.
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m³ (Total Dust)
5 mg/m³ (Respirable Dust)

PEL: 15 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

[1]XEL: 5 mg/m³ (Total Dust)

AR200912

Additional Information: The information noted above is based on toxicity data for 6500 and 2830 Toners..*Not tested to the highest dose or concentration.

[1]XEL - Xerox Exposure Limit

N.A. - Not Applicable

Section IV - Physical Data

Appearance/Odor: Green granular / faint odor
Boiling Point: N.A.
Solubility in Water: N. A.
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H_2O = 1): N.A.
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: If spilled, sweep up or vacuum.

Waste Disposal Method: No special disposal procedures. Insure conformity with federal, state or local regulations.

AR200913

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A.
ID Number: N. A.

XEROX

Material Safety Data Sheet

MSDS No.: 0233
Date: Oct. 9, 1984
Revision: Sept. 19, 1985

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

Section I - Product Identification

Trade Names/Synonyms: 1025/1038 Red Developer Part No. : 5R143

Chemical Name: None

Ingredients	CAS No.
Carrier (>90%):	
Ferrite Powder	----------
Toner (<10%):	
Styrene, Acrylate Copolymer (60-65%)	25213-39-2
Acrylic Resin (25-30%)	----------
Red Pigment; Barium Salt (<10%)	----------
Polyolefin (<5%)	----------
Magenta Pigment; Quinoacridine Derivative (<1%)	----------
Amorphous Silica (<1%	7631-86-9

Section II - Emergency and First Aid

Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Additional Information: See Sections V and VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been extensively tested and evaluated by Xerox Corporation. When used as intended, it does not represent any known health or safety hazard.

Oral LD_{50}: >5 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >2 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >5 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) non-irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-irritating, non-sensitizing,
Mutagenicity: No mutagenicity detected in Ames and Micronucleus Assays.
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic

TLV: 10 mg/m³ (Total Dust)
5 mg/m³ (Respirable Dust)

PEL: 15 mg/m³ (Total Dust)
5mg/m³ (Respirable Dust)

[1]XEL: 5 mg/m³ (Total Dust)

AR200914

Additional Information: The information noted above is based on toxicity data for 6500 and 2830 Toners. *Not tested to the highest dose or concentration.

[1]XEL - Xerox Exposure Limit

N.A. - Not Applicable

Trade Name: 1025/1038 Red Developer

MSDS No.: 0233

Section IV - Physical Data

Appearance/Odor: Red granular / faint odor
Boiling Point: N.A.
Solubility in Water: N. A.
Evaporation Rate: N.A.
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) N.A. % (Vol.)

Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H_2O = 1): N.A.
Vapor Pressure (mm Hg): N.A.
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Water, Foam, Dry chemical

Special Fire Fighting Procedures: Avoid inhalation of smoke.

Fire and Explosion Hazards: Toner is a combustible powder. When dispersed in air, it forms explosive mixtures.

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Products of combustion are toxic. Avoid breathing smoke.

Incompatability (Materials to Avoid): None

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: If spilled, sweep up or vacuum.

Waste Disposal Method: No special disposal procedures. Insure conformity with federal, state or local regulations.

AR200915

Section X - Transportation Information

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A.
ID Number: N. A.

Material Safety Data Sheet

QUICK IDENTIFIER (In Plant Common Name)

Fast Draw

Manufacturer's Name	Blackburn	Emergency Telephone No.	314-993-9430
Address	1525 Woodson Road St. Louis, Mo. 63114	Other Information Calls	314-993-9430
Signature of Person Responsible for Preparation	James T. Renshaw, Jr.	Date Prepared	February 1986

SECTION 1 - IDENTITY

Common Name: (used on label) (Trade Name & Synonyms)	Fast Draw Wire Lube	Cas No.	N/A
Chemical Name	N/A	Chemical Family	N/A
Formula	Modified Wax and Water		

SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Components(s) (chemical & common name(s))	%	Threshold Limit Value (units)
N/A		

PPE A

UN NA

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point	N/A	Specific Gravity (H_2O=1) 1.125	Vapor Pressure (mm Hg) N/A
Percent Volatile by Volume (%) 18%	Vapor Density (Air = 1) N/A	Evaporation Rate (_____ = 1) Slightly Less Than H_2O	
Solubility in Water	Miscible	Reactivity in Water	N/A
Appearance and Odor	Medium Yellow, Creamy -- Practically Odorless		

Flash Point Open Cup	Flammable Limits in Air % by Volume	Lower 365°	Upper 370°	Extinguisher Media N/A	Auto-Ignition Temperature N/A
Special Fire Fighting Procedures	None Except H_2O Not Recommended				
Unusual Fire and Explosion Hazards	None				

RECEIVED
AR200916
AUG 1 1986
C. MURAWCZYK

SECTION 4 - PHYSICAL HAZARDS

Stability: Unstable ☐ Stable ☒ — Conditions to Avoid: N/A

Incompatability (Materials to Avoid): None Known

Hazardous Decomposition Products: None

Hazardous Polymerization: May Occur ☐ Will Not Occur ☒ — Conditions to Avoid: N/A

SECTION 5 - HEALTH HAZARDS

Threshold Limit Value: None Known

Signs and Symptoms of Exposure — 1. Acute Overexposure: None Known

2. Chronic Overexposure: None Known

Medical Conditions Generally Aggravated by Exposure: None Known

Chemical Listed as Carcinogen or Potential Carcinogen: No

National Toxicology Program: Yes ☐ No ☒

I.A.R.C. Monographs: Yes ☐ No ☒

OSHA: Yes ☐ No ☒

OSHA Permissible Exposure Limit: Not Known

ACGIH Threshold Limit Value: Not Known

Other Exposure Limit Used: None

Emergency and First Aid Procedures: See Below

1. Inhalation: Should not apply

2. Eyes: Wash with water for 15 minutes. Seek medical attention if needed.

3. Skin: Skin contact should not cause irritation. Slight skin absorption. Wash with warm wat

4. Ingestion: Treat as with other petroleum products. Do not induce vomiting. Get medical attentio

SECTION 6 - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): None

Ventilation: N/A — Local Exhaust: N/A — Mechanical (General): N/A — Special: N/A — Other: N/A

Protective Gloves: Not generally needed — Eye Protection: Not generally needed

Other Protective Clothing or Equipment: None

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage: Store in cool place, avoid freezing and thawing. These are precautions to avoid breaking the emulsion and not because of any hazard.

Other Precautions: Not for human or animal consumption.

Steps to be Taken in Case Material is Released or Spilled: Wash with hot water

AR200917

Waste Disposal Methods: Dispose as with oil

IMPORTANT
Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.

MATERIAL SAFETY DATA SHEET

NALCO

PRODUCT FIRE-PREP 8256 MICROBIOCIDE

Emergency Telephone Number
Medical (312) 920-1510 (24 hours)

SECTION 1 PRODUCT IDENTIFICATION

TRADE NAME: FIRE-PREP 8256 MICROBIOCIDE
DESCRIPTION: A hydrocarbon solution containing a formaldehyde aliphatic amine condensation product

NFPA 704M RATING 3 HEALTH 2 FLAMMABILITY 0 REACTIVITY 0 OTHER
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

PPE D
UN 1760

SECTION 2 HAZARDOUS INGREDIENTS

Our hazard evalution has identified the following chemical ingredient(s) as hazardous. One or more is being claimed as a trade secret under OSHA's Hazard Communication Rule, 29 CFR 1910.1200. Consult Section 14 for the nature of the hazard(s).

INGREDIENT(S)	CAS #	APPROX.%
Heavy aromatic naphtha	64742-94-5	30
Proprietary chemical	Proprietary	20

SECTION 3 PRECAUTIONARY LABEL INFORMATION

DANGER: Harmful if swallowed, inhaled, or absorbed through the skin. Causes severe eye and skin damage. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Keep away from heat and open flame. Keep container closed when not in use. Avoid breathing of vapor. Use with adequate ventilation. Do not take internally.

Empty containers may contain residual product. Do not reuse container unless properly reconditioned.

SECTION 4 FIRST AID INFORMATION

EYES: Immediately flush for at least 15 minutes while holding eyelids open. Call a physician at once.

SKIN: Immediately flush with water for at least 15 minutes. For a large splash, flood body under a shower. Call a physician at once.

INGESTION: Do not induce vomiting. Give water. Call a physician at once.

INHALATION: Remove to fresh air. Treat symptoms. Call a physician at once.

RECEIVED
OCT 0-6 1986
AR200918

NOTE TO PHYSICIAN: No specific antidote is known. Based on the

C. MURAWCZYK

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60566-1024
AREA 312-961-9500

SECTION 4 FIRST AID INFORMATION (CONTINUED)

individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed.

SECTION 5 HEALTH EFFECTS INFORMATION

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin, Inhalation

EYE CONTACT:	Corrosive to the eyes with possible permanent damage depending on the length of exposure and on the first aid action given.
SKIN CONTACT:	Corrosive to the skin, possibly resulting in third degree burns depending on the length of exposure and on the first aid action given.
INGESTION:	Can be fatal.
INHALATION:	Prolonged inhalation of vapor may be harmful.

SYMPTOMS OF EXPOSURE: A review of available data does not identify any symptoms from exposure.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not identify any worsening of existing conditions.

SECTION 6 TOXICOLOGY INFORMATION

ACUTE TOXICITY STUDIES: Acute toxicity studies have been conducted on this product. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RATS): LD_{50} = 2,500 mg/kg

95% Confidence Limit = Plus or minus 400 mg/kg

ACUTE DERMAL TOXICITY (ALBINO RABBITS): LD_{50} = 5,600 mg/kg

COMMENTS: Severe local skin reactions noted including severe edema and subdermal hemorrhage leading to necrosis.

AR200919

ACUTE INHALATION TOXICITY (ALBINO RATS): LC_{50} = Greater than 2.0 mg/l

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60566-1024
AREA 312-961-9500

SECTION 6 TOXICOLOGY INFORMATION (CONTINUED)

COMMENTS: 4-hour vapor exposure, nominal concentration

PRIMARY SKIN IRRITATION TEST (ALBINO RABBITS):
SKIN IRRITATION INDEX DRAIZE RATING: 8.0/8.0 Extremely irritating

COMMENTS: Corrosive material

PRIMARY EYE IRRITATION TEST (ALBINO RABBITS):
EYE IRRITATION INDEX DRAIZE RATING: 94/110.0 Extremely irritating

SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Clear amber	FORM: Liquid	ODOR: Hydrocarbon
SOLUBILITY IN WATER:	Insoluble	
SPECIFIC GRAVITY:	0.92 @ 60 Degrees F	
VISCOSITY:	106 cts/97 cps/489 SUS @ 60 Degrees F	ASTM D-445
POUR POINT:	Less than -22 Degrees F	ASTM D-97
FLASH POINT:	151 Degrees F (PMCC)	ASTM D-93
PERCENT VOLATILE:	2 @ 75 Degrees F	ASTM D-323

NOTE: These physical properties are typical values for this product.

SECTION 8 FIRE AND EXPLOSION INFORMATION

FLASH POINT: 151 Degrees F (PMCC) ASTM D-56

EXTINGUISHING MEDIA: Based on the NFPA guide, use dry chemical, alcohol foam, carbon dioxide or other extinguishing agent suitable for Class B fires. Use water to cool containers exposed to fire. For large fires, use water spray or fog, thoroughly drenching the burning material.

UNUSUAL FIRE AND EXPLOSION HAZARD: Containers exposed in a fire should be cooled with water to prevent vapor pressure buildup leading to a rupture.

SECTION 9 REACTIVITY INFORMATION

INCOMPATIBILITY: Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygens permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

AR200920

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60566-1024
AREA 312-961-9500

SECTION 9 REACTIVITY INFORMATION (CONTINUED)

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO_2, NOx, may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

SECTION 10 PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION: If it is possible to generate significant levels of vapors or mists, a NIOSH approved or equivalent respirator is recommended.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a pressure-demand, self-contained breathing apparatus is recommended.

VENTILATION: General ventilation is recommended. Additionally, local exhaust ventilation is recommended where vapors, mists or aerosols may be released.

PROTECTIVE EQUIPMENT: Wear gloves, boots, apron and a face shield with chemical splash goggles (ANSI Z 87.1 requirements and selection of gloves, goggles, shoes, etc.). A full slicker suit is recommended if gross exposure is possible.

The availability of an eye wash fountain and safety shower is recommended.

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Discard contaminated shoes and leather items.

SECTION 11 SPILL AND DISPOSAL INFORMATION

IN CASE OF TRANSPORTATION ACCIDENTS, CALL THE FOLLOWING 24-HOUR TELEPHONE NUMBER (312-920-1510)

SPILL CONTROL AND RECOVERY:

Small liquid spills: Contain with absorbent material, such as saw dust, clay, soil or any commercially available absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. Refer to CERCLA in Section 14.

AR200921

Large liquid spills: Dike to prevent further movement and reclaim into

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60566-1024
AREA 312-961-9500

SECTION 11 SPILL AND DISPOSAL INFORMATION (CONTINUED)

recovery or salvage drums or tank truck for disposal. Refer to CERCLA in Section 14.

For large indoor spills, evacuate employees and ventilate area. Those responsible for control and recovery should wear the protective equipment specified in Section 10.

DISPOSAL: If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, (i.e. D001 through D017) nor is it listed under Subpart D.

As a non-hazardous liquid waste, it should be solidified before disposal to a sanitary landfill. Can be incinerated in accordance with local, state and federal regulations.

SECTION 12 ENVIRONMENTAL INFORMATION

AQUATIC DATA:
96-hour static acute LC_{50} to Bluegill Sunfish = 1.09 ppm

95% Confidence Limit of 96 hour LC_{50} = 0.93 - 1.24 ppm

TOXICITY RATING: Toxic

96-hour static acute LC_{50} to Rainbow Trout = 1.17 ppm

TOXICITY RATING: Toxic

OTHER STUDIES:
8-day dietary LC_{50} - Bobwhite Quail = Greater than 5,000 ppm
8-day dietary LC_{50} - Mallard Ducks = Greater than 5,000 ppm

If released into the environment, see CERCLA in Section 14.

SECTION 13 TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME/HAZARD CODE - CORROSIVE LIQUID, N.O.S. UN 1760
CONTAINS - ORGANIC AMINE COMPOUND

SECTION 14 REGULATORY INFORMATION

The following regulations apply to this product.

AR200922

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60566-1024
AREA 312-961-9500

SECTION 14 REGULATORY INFORMATION (CONTINUED)

FEDERAL REGULATIONS:

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:
Based on our hazard evaluation, the following ingredients in this product are hazardous and the reasons are shown below.

Heavy aromatic naphtha - Irritant, combustible
Proprietary chemical - Corrosive

Heavy aromatic solvent = 100 ppm TLV
Manufacturer's recommendation

CERCLA/SUPERFUND, 40 CFR 117, 302:
Notification of spills of this product is not required.

TOXIC SUBSTANCES CONTROL ACT (TSCA):
This product is registered under FIFRA. The inerts are on the inventory and the active is exempted.

FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT (FIFRA):
EPA Reg. No. 1706-101A.
This product is registered for use as a microorganism control chemical used in distillate fuel oil treatment. In all cases follow instructions on the product label.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:
If this product becomes a waste, it does not meet the criteria of a hazardous waste.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 (formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):
None of the ingredients are specifically listed.

CLEAN AIR ACT, 40 CFR 60, SECTION 111, 40 CFR 61, SECTION 112:
This product does not contain ingredients covered by the Clean Air Act.

STATE REGULATIONS:

MICHIGAN CRITICAL MATERIALS:
This product does not contain ingredients listed on the Michigan Critical Materials Register.

AR200923

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60566-1024
AREA 312-961-9500

SECTION 14 REGULATORY INFORMATION (CONTINUED)

STATE RIGHT TO KNOW LAWS:
This product does not contain ingredients listed by State Right To Know Laws.

SECTION 15 ADDITIONAL INFORMATION

None

SECTION 16 USER'S RESPONSIBILITY

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.

SECTION 17 BIBLIOGRAPHY

ANNUAL REPORT ON CARCINOGENS, U.S. Department of Health and Human Services, Public Health Service, PB 33-135855, 1983.

CASARETT AND DOULL'S TOXICOLOGY, THE BASIC SCIENCE OF POISONS, Doull, J., Klaassen, C. D., and Admur, M. O., eds., Macmillian Publishing Company, Inc., N. Y., 2nd edition, 1980.

CHEMICAL HAZARDS OF THE WORKPLACE, Proctor, N. H., and Hughes, J. P., eds., J. P. Lipincott Company, N.Y., 1981.

DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, Sax, N. Irving, ed., Van Nostrand Reinhold Company, N.Y., 6th edition, 1984.

IARC MONOGRAPHS ON THE EVALUATION OF THE CARCINOGENIC RISK OF CHEMICALS TO MAN, Geneva: World Health Organization, International Agency for Research on Cancer, 1972-1977.

PATTY'S INDUSTRIAL HYGIENE AND TOXICOLOGY, Clayton, G. D., Clayton, F. E., eds., John Wiley and Sons, N. Y., 3rd edition, Vol. 2 A-C, 1981.

REGISTRY OF TOXIC EFFECTS ON CHEMICAL SUBSTANCES, U.S. Department of Health and Human Services, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health, 1983

AR200924

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60566-1024
AREA 312-961-9500

SECTION 17 BIBLIOGRAPHY (CONTINUED)

supplement of 1981-1982 edition, Vol. 1-3, OH, 1984.

Title 29 Code of Federal Regulations Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).

THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS IN THE WORKROOM ENVIRONMENT WITH INTENDED CHANGES, American Conference of Governmental Industrial Hygienists, OH.

PREPARED BY: John J. Kasper, MSc., Manager Product Safety
DATE CHANGED: 06/19/86 DATE PRINTED: 09/29/86

AR200925

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60566-1024
AREA 312-961-9500

Chemtronics

CHEMTRONICS INC. 681 Old Willets Path, Hauppauge, N.Y. 11788 (516) 582-3322

PPE A

UN N/A

U.S. Department of Labor
Occupational Safety & Health Administration (OSHA)
MATERIAL SAFETY DATA SHEET

PRODUCT TYPE:	Electronic Degreasers		Flux Removers	
Trade Name & Synonyms:	Electro Wash	Freon TF	Flux-Off	Flux-Off NR
Chemical Family:	Halogenated hydrocarbon solvents, propellant	Halogenated hydrocarbon solvent, propellant	Halogenated hydrocarbon solvents, propellant	Halogenated hydrocarbon solvent, aliphatic alcohol, inhibitor, propellant
Section II INGREDIENTS	Trichlorofluoromethane Trichlorotrifluoroethane (97%) TLV 1000 PPM Carbon Dioxide (3%) TLV 5000 PPM	Trichlorotrifluroethane (97%) TLV 1000 PPM Carbon Dioxide (3%) TLV 5000 PPM	Trichlorotrifluoroethane (48.5%) TLV 1000 PPM Methylene Chloride (48.5%) TLV 500 PPM Carbon Dioxide (3%) TLV 5000 PPM	Trichlorotrifluoroethane (91.5%) TLV 1000 PPM Methyl Alcohol (5.3%) TLV 200 Carbon Dioxide (3%) TLV 5000 Nitromethane (0.2%) TLV 100 (gallons only)
Section III PHYSICAL DATA OF SOLVENT SYSTEM				
Boiling Point Range (°F)	75 → 118	116 → 118	96 → 98	103 → 105
Water Solubility	0.08%	0.02%	about 0.1%	0.1%
Specific Gravity ($H_2O = 1$)	1.46 @ 77°F	1.57 @ 77°F	1.42 @ 77°F	1.52 @ 77°F
Percent Volatile	100	100	100	100
Appearance	Colorless liquid	Colorless liquid	Colorless liquid	Colorless liquid
Odor	Slight ethereal odor	Slight ethereal odor	Slight ethereal odor	Slight ethereal odor
Section IV FIRE & EXPLOSION HAZARD DATA				
Flash Point	None	None	None	None
Extinguishing Media	Non-flammable	Non-flammable	Non-flammable	Non-flammable
Unusual Fire & Explosive Hazards	Self contained breathing apparatus and protective clothing should be worn in fighting fires when chemicals are present. At flame temperatures (above 400°F) decomposition products are extremely toxic. Aerosol can will not withstand temperatures above 120°F – explosion and resulting damage will occur.			**Danger Poison: Contains Methanol** May be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Antidote: If swallowed, do not induce vomiting. Have patient lie down and keep warm. Cover eyes to exclude light. Call a physician immediately.
Section V HEALTH HAZARD DATA				
Threshold Limit Value (TLV)	1000 PPM	1000 PPM	500 PPM	700 PPM
Effects of Over Exposure	Light headedness, giddiness, shortness of breath, possible narcosis, possible cardiac arrythmias at high concentrations.			
First Aid Procedures	Inhalation: Remove to fresh air. Do not give epinephrine or similar drugs. If necessary, call a physician. Skin or eye contact: Flush with water that is not hot or too cold. If necessary, call a physician.			
Section VI REACTIVITY DATA				
Incompatibility	Avoid open flames and high temperatures: 120°F for aerosols, 400°F for solvent spray and liquid. Avoid contact with alkali and alkaline earth metals including powdered aluminum, beryllium and zinc.			
Hazardous Decomposition Products	Hydrochloric and hydrofluoric acids, also possible carbonyl halides.			Addition of excess water (over 0.2%) will extract alcohol and may form a flammable supernatant liquid layer
Section VII SPILL OR LEAK PROCEDURES				
Steps to be taken	Ventilate area especially low places where heavy vapor might collect. Remove open flames and hot (120°F) objects.			
Waste Disposal Method	Exhaust aerosol can contents to atmosphere at a rate that the TLV is not exceeded. Chemtronics recommends that all local, state and federal regulations concerning health and pollution be reviewed to determine approved disposal procedures.			
Section VIII SPECIAL PROTECTION INFORMATION				
Respiratory Protection	Avoid breathing mist during spray applications. Use approved respiratory protection such as an air supplied mask or MSHA/NIOSH approved organic type respirator in absence or proper environmental control, or when used in an enclosed space, or when high concentrations are present.			
Section IX SPECIAL PRECAUTION				
Handling and Storing	Safety glasses or goggles are required. A safety shower and eye wash station should be present for all industrial chemical applications.			
Other Precautions	Do not store where temperatures might exceed 120°F. Use with adequate ventilation (equivalent to outdoors). Do not use where open flames, heating elements, or other hot objects (above 400°F) are present. Do not ingest. Do not eat, drink or smoke where vapors are present. Keep out of the reach of children.			

AR200926

Chemtronics PPE A UN 2857

RECEIVED

APR 14 1987

ORIGINAL (Red)

C. MURAWCZYK

CHEMTRONICS INC. 681 Old Willets Path, Hauppauge, N.Y. 11788 (516) 582-3322

U.S. Department of Labor
Occupational Safety & Health Administration (OSHA)
MATERIAL SAFETY DATA SHEET

PRODUCT TYPE:	FREON TP-35	Circuit Refrigerants	
Trade Name & Synonyms:	[redacted]	Freez-it Anti-Stat®	Component Cooler
Chemical Family:	Halogenated [redacted]	Halogenated Hydrocarbon	Halogenated Hydrocarbon(s)
Section II INGREDIENTS	Dichlorodifluoromethane (100%) TLV 1000	Dichlorodifluoromethane (100%) TLV 1000	Dichlorodifluoromethane (70%) TLV 1000 Trichlorofluoromethane (30%) TLV 1000
Section III PHYSICAL DATA OF SOLVENT SYSTEM			
Boiling Point Range (°F)	−21.6	−21.6	−21.6-70
Water Solubility	0.01%	0.01%	0.01%
Specific Gravity ($H_2O = 1$)	1.31 @ 77°F	1.31 @ 77°F	1.36 @ 77°F
Percent Volatile	100	100	100
Appearance	Colorless liquid	Colorless liquid	Colorless liquid
Odor	Slightly ethereal odor	Slightly ethereal odor	Slightly ethereal odor
Section IV FIRE & EXPLOSION HAZARD DATA			
Flash Point	None	None	None
Extinguishing Media	Non-flammable	Non-flammable	Non-flammable
Unusual Fire & Explosive Hazards	Self contained breathing apparatus should be worn in fighting fire where chemicals are present. At flame temperatures (above 400°F) decomposition products are extremely toxic. Aerosol cans will not withstand temperatures above 120°F-explosion and resulting damage will occur.		
Section V HEALTH HAZARD DATA			
Threshold Limit Value (TLV)	1000 PPM	1000 PPM	1000 PPM
Effects of Over Exposure	Light headedness, giddiness, shortness of breath, possible narcosis, possible cardiac arrythmias at high concentrations. (Skin) Can cause frostbite. (Eye) Can cause frostbite.		
First Aid Procedures	Inhalation: Remove to fresh air. Do not give epinephrine or similar drugs. If necessary, call a physician. Skin or eye contact: Flush with water that is not hot or too cold. If necessary, call a physician.		
Section VI REACTIVITY DATA			
Incompatibility	Avoid open flames and high temperatures – 120°F for aerosols, 400°F for solvent spray and liquid. Avoid contact with alkali and alkaline earth metals including powdered aluminum, beryllium and zinc.		
Hazardous Decomposition Products	Hydrochloric and hydrofluoric acids, also possible carbonyl halides.		
Section VII SPILL OR LEAK PROCEDURES			
Steps to be taken	Ventilate area especially low places where heavy vapor might collect. Remove open flames and hot (120°F) objects.		
Waste Disposal Method	Exhaust aerosol can contents to atmosphere at a rate that the TLV is not exceeded. Chemtronics recommends that all local, state and federal regulations concerning health and pollution be reviewed to determine approved disposal procedures.		
Section VIII SPECIAL PROTECTION INFORMATION			
Respiratory Protection	Avoid breathing mist during spray applications. Use approved respiratory protection such as an air supplied mask or MSHA/NIOSH approved organic type respirator in absence or proper environmental control, or when used in an enclosed space, or when high concentrations are present.		
Section IX SPECIAL PRECAUTION			
Handling and Storing	Safety glasses or goggles are required. A safety shower and eye wash station should be present for all industrial chemical applications.		
Other Precautions	Do not store where temperatures might exceed 120°F. Use with adequate ventilation (equivalent to outdoors). Do not use where open flames, heating elements, or other hot objects (above 400°F) are present. Do not ingest. Do not eat, drink or smoke where vapors are present. Keep out of the reach of children.		

AR200927

XEROX

Material Safety Data Sheet

MSDS No.: 0407
Date: Apr. 28, 1983
Revision: Aug. 25, 1986

Manufacturer: Xerox Corporation
Rochester, New York 14644

Emergency Tel. No. : (716) 422-2177
Information Tel. No.: (800) 828-6571

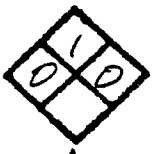
Section I - Product Identification

Trade Names/Synonyms: Silicone Fuser Oil, Fuser Lubricant

Part No. : 8R79, 8R111, 8R983, 8R2404

Chemical Name: Polydimethylsiloxane

Ingredients	CAS No.
Polydimethylsiloxane	63148-62-9



PPE A

UN NA

RECEIVED
OCT 14 1986
C. MURAWCZYK

Section II - Emergency and First Aid

Eyes: Flush eyes thoroughly with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.
Primary Route of Entry: Inhalation
Symptoms of Overexposure: May cause minimal irritation of respiratory passages on continuous exposure to high concentrations.

Additional Information: See Sections V through VII.
Further information on file in Poisindex.

Section III - Toxicology and Health Information

This material has been tested and evaluated by Xerox Corporation. When used as intended, it does not represent a health or safety hazard.

Oral LD_{50}: >35 g/kg (Rats) practically non-toxic.
Dermal LD_{50}: >3 g/kg (Rabbits) practically non-toxic.
Inhalation LC_{50}: >11 mg/l (Rats) practically non-toxic.*
Eye Irritation: (Rabbits) mildly irritating
Skin Sensitization: (Guinea Pigs) non-sensitizing
Skin Irritation: (Rabbits) non-irritating
Human Patch: Non-irritating, non-sensitizing
Mutagenicity: No mutagenicity detected in Ames, UDS, and Dominant Lethal Assays.
Carcinogens: None present
Aquatic LC_{50}: >500 mg/l (Fathead Minnows) non-toxic
Additional Information: Biodegradation /non-biodegradable, Bioaccumulation/no evidence of accumulation. *Not tested to the highest dose or concentration.

TLV: N.A.
PEL: N.A.

AR200928

[1]XEL - Xerox Exposure Limit

Section IV - Physical Data

Appearance/Odor: Clear liquid/slight odor
Boiling Point: 149°C
Solubility in Water: Negligible
Evaporation Rate: <1, ether = 1
Vapor Density (Air = 1): N.A.
Volatile N.A. % (Wgt.) <5 % (Vol.)

Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H_2O = 1): 0.98
Vapor Pressure (mm Hg): <5
pH = N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): >260°C (>500°F) C.O.C.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: Foam, Carbon dioxide, Water Spray

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Fire and Explosion Hazards: None

Section VI - Reactivity Data

Stability:			Hazardous Polymerization:		
	Unstable			May Occur	
	Stable	X		Will Not Occur	X

Hazardous Decomposition Products: Silicone dioxide, Carbon dioxide, and traces of incompletely burned carbon products.

Incompatability (Materials to Avoid): Strong oxidizing materials

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: None required when used as intended in Xerox equipment.

Section VIII - Special Precautions

Handling and Storage: Use reasonable care and caution . Clean up spills completely as residue is slippery.

Conditions to Avoid: None

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Soak up with an absorbent material.

Waste Disposal Method: Absorb liquid on vermiculite or other absorbent material. Dispose according to local, state and federal regulations.

Section X - Transportation Information

AR200929

DOT Proper Shipping Name: Not Regulated
Hazard Classification: N. A.
ID Number: N. A.

BUTCHER'S

Material Safety Data Sheet

00120

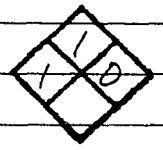
Manufacturer's Name	The Butcher Polish Company	Emergency Telephone No	(617) 481-5700
Address	120 Bartlett Street, Marlborough, MA 01752		
Signature of Person Responsible for Preparation	Bonita C Patterson	Date Prepared	March 19, 1985

IDENTITY

Common Name (used on label) Trade Name & Synonyms) GREEN SUBMARINE Cleaner

INGREDIENT INFORMATION

Principal Hazardous Component(s) (chemical & common name(s))	CAS No	%	Threshold Limit Value (units)
Sodium carbonate	497-19-8	1-2	NE
Sodium metasilicate	6834-92-0	1-2	NE



PPE B

UN 1142

PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	212°			Specific Gravity (H_2O = 1)	1.02	Vapor Pressure	ND
Percent Volatile by Volume (%)	92	Vapor Density (Air = 1)	ND	Evaporation Rate (_____ = 1)	NA		
Solubility in Water	Complete						
Appearance and Odor	Clear green viscous liquid; mint odor.						

Flash Point	200°F+	Flammable Limits in Air % by Volume	Lower ND	Upper	Extinguisher Media	NA	
Special Fire Fighting Procedures	This product is not flammable.						
Unusual Fire and Explosion Hazards	None known to THE BUTCHER POLISH CO.						

RECEIVED
C. MURAWCZYK
AR200930

ND = Not Determined NE = Not Established NA = Not Applicable

BUTCHER'S

Common Name (used on label)
Trade Name & Synonyms) GREEN SUBMARINE

REACTIVITY DATA

ORIGINAL (Red)

Stability Unstable ☐ Conditions
Stable ☒ to Avoid None known

Incompatibility, Materials to Avoid: Acids (e.g. muriatic), oxidizers (e.g bleach)

Hazardous Decomposition Products Normal products of combustion.

Hazardous Polymerization May Occur ☐ Will Not Occur ☒ Conditions to Avoid None known to THE BUTCHER POLISH CO.

HAZARD DATA

Signs and Symptoms of Overexposure Direct contact of product with eyes may cause burns. Prolonged or repeated contact with skin may cause irritation. Inhalation of mist may irritate respiratory tract. Pre-existing eye, skin and respiratory disorders may be aggravated.

Chemical Listed as Carcinogen or Potential Carcinogen None

Emergency and First Aid Procedures

1 Inhalation Remove to fresh air. Call a physician if symptoms persist.

2 Eyes Flush with water for at least 15 minutes. Call a physician.

3 Skin Flush with water. Call a physician if irritation develops.

4 Ingestion Drink large quantities of water. Do not induce vomiting. Call a physician.

SPECIAL PROTECTION INFORMATION

Respiratory Protection None required if good ventilation is maintained.

Protective Gloves If prolonged or repeated contact is possible, wear rubber or other impervious gloves.

Eye Protection Where eye contact may occur, wear chemical splash goggles and face shield.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage Practice good personal hygiene. Wash contaminated clothing and equipment before reuse.

Steps to be Taken in Case Material is Released or Spilled Before attempting clean-up, refer to Hazard Data above. Use mop or wet vacuum to collect material for proper disposal. Rinse area with water.

Waste Disposal Methods Dispose of this material in accordance with federal, state and local regulations.

AR 200930A

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user

Sika Corporation

PPE B
HN 1997

MATERIAL SAFETY DATA SHEET

Manufacturer's Name: Date of Preparation: July 12, 1985

Sika Corporation
875 Valley Brook Avenue
Lyndhurst, NJ 07071

Telephone Numbers: Emergency: 800-424-9300 Information: 201-933-8800

SECTION I - PRODUCT IDENTIFICATION

Product No: Sikaflex 405 Product Class: Petroleum Residuals

Product Label Name: Igas Pressure Grade Formulation Identification: 01/5/79

SECTION II - HAZARDOUS INGREDIENTS

Ingredient	Percent	Listing NTP	Listing IARC	Occupational Exposure Limits TLV	Occupational Exposure Limits PEL	Vapor Pressure
Asbestos (12001-29-5)	29%	Yes	Yes	2 fibers/cc >5 mm in length		N/A
Coal Tar (65996-93-2)	0.3%	Yes	No	0.2 mg/m^3		N/A

As supplied, the asbestos is coated with the liquid vehicle. We therefore feel the hazards of the dry state are altered and minimized.

RECEIVED
OCT 02 1986
C. MURAWCZYK

SECTION III - PHYSICAL DATA

Boiling Range: N/A Vapor Density:___ x Heavier ___Lighter Than Air

Evap. Rate:___Faster x Slower than Ether Trace % Volatile Volume
10.3 Wt/Gal

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Classification: N/A OSHA <325 F FLASH POINT

N/A LEL x DOT NONCOMBUSTIBLE

Extinguishing Media: x Foam x CO2 x Dry Chemical ___"Alcohol"

___ Water Fog ____Other

Unusual Fire and Explosion Hazards:

None

Special Fire Fighting Procedures:

None

SECTION V - HEALTH HAZARD DATA

Effects of Overexposure:

Possible irritation to mucous membranes and burns associated with usage of hot material.

Medical Conditions Prone to Aggravation by Exposure:

Asthma type conditions, chronic bronchitis, and other chronic respiratory conditions.

Recurrent skin eczema.

Test have shown that asbestos and coal tar products have been known to cause cancer in humans.

SECTION V - HEALTH HAZARD DATA (cont)

Primary Route(s) of Entry: x Dermal ____Inhalation ____Ingestion

Emergency and First Aid Procedures:

Skin: For minor skin burns, chill first, then remove with mineral oil. Do not use injurious solvents for removal. See physician immediately.

SECTION VI - REACTIVITY DATA

Stability: ____Unstable x Stable

Hazardous Polymerization: ____May Occur x Will Not Occur

Hazardous Decomposition Products:

Toxic fumes if heated to decomposition.

Conditions To Avoid:

N/A

Incompatibility (Materials To Avoid):

Oxidizing material and strong acids.

SECTION VII - SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Collect and contain material and transfer to containers to discard.

SECTION VII - SPILL OR LEAK PROCEDURES (cont)

aste Disposal:

Dispose of in accordance with Federal, State, or Local Regulations regarding environmental control.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

Respiratory Protection:

Organic vapor canister mask unless ventilation is adequate.

Ventilation:

Local Exhaust Recommended

Protective Gloves, Heat resistant
Eye Protection: Safety glasses or chemical goggles

Other Protective Equipment: Long sleeve shirt recommended.
As required by your company.

Hygienic Practices: Change contaminated clothing.

SECTION IX - SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling and Storing:

Prevent contact with heated material.

Other Precautions:

Avoid inhalation of any fumes which may develop from heating. Store in tightly closed containers.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information set forth herein is based on technical data that Sika believes to be reliable as of the date hereof. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents.

ATTACHMENT B

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
3-M Desk & Office Cleaner	Commercial Office Supply		JC	A
3302 Toner, 973-712	Royal Business Machines	*	CR, CS, X	V
A. W. Faber-Castell Higgins Black Magic	Higgins Ink Company, Inc.		X	A
All Purpose Absorbent for Floors Oil & Grease Absorbent	Waverly Mineral Products Co.		TR	FMC
Antifoam	Virginia Chemicals Inc.		MR	FMC
Armstrong Adhesive S-89	Armstrong World Industries	*	MR	FMC, LP
Armstrong Adhesive 520	Armstrong World Industries	*	ME	FMC
Armstrong S-285 Wall Base Adhesive	Armstrong World Industries	*	MR	FMC
Artline 500 White Board Marker	Shachihata Products		O	A
Austin's Clear Ammonia	James Austin Co.		JC	JP
Balan 2.5G	Elanco Products Co.	*	Not Stored Here	V
Balan E.C	Elanco Products Co.	*	Not Stored Here	V
Bestine Solvent & Thinner	Union Rubber, Inc.	*	LO, X, CR, CS	FMC, LP, CO

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Blackburn Contax Contact Paste	ITT Blackburn Co.		LO	LP
Butcher's Bowling Alley Wax	Butcher Polish Co.		MO	FMC
Butcher's Bright Washroom Cleaner	Butcher Polish Co.	*	JC	JP, FMC
Butcher's Deodorant Concentrated	Butcher Polish Co.	*	MO	JP, FMC
Butcher's FLASHBACK Prespray for Heavily Soiled Carpets	Butcher Polish Co.		MO	JP, FMC
Butcher's Pearly Tile & Porcelain Clean	Butcher Polish Co.	*	MO	JP, FMC
Butcher's Power Cleaner Speedball	Butcher Polish Co.	*	MO	JP, FMC
Butcher's Silky Furniture Polish	Butcher Polish Co.		MO	FMC
Butcher's Sun Bath Deodorizing Cleaner	Butcher Polish Co.	*	MO	JP, FMC
Butcher's Timebuster Stripper	Butcher Polish Co.		MO	FMC
Butyl Acetate	J. T. Baker Company	*	LO	LP

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Cabot's Tasgon Penetrating Lubricant	Samuel Cabot, Inc.		LO, MR	LP, FMC
Carpet Magic "Steam" Cleaning Defoamer	Carpet Magic Div of Hartz Mountain Corp.		JC	JP
Carter's Rubber Cement #08-450	Dennison Manufacturing Co.		O	A
Chapco Seam Bond Solvent	Chicago Adhesive Products Co.		MR	FMC
Chipco Ronstar G Oxadiazon	Rhone-Poulene, Inc.	*	Not Stored Here	V
Chipco Ronstar G Oxadiazon Formulated Granular	Rhone-Poulene, Inc.	*	Not Stored Here	V
Classic Stamp Pad Ink Red	Classic Stamp Pad Ink Co., Inc.		O	A
Cleaning Solvent, Product #199-65064G			LO	LP
C.M.A. Super 21 Rug Shampoo	Clausen Marketing Associates		JC	JP
Complex 66 Degreaser	Bullen Chemical Co.	*	MO	FMC, JP
CRC 5-56	CRC Chemicals	*	LO	LP, FMC

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
CRC Silicone #02094	CRC Chemicals		LO	LP, FMC
Dazzle Metal Cleaner & Polish	Zimmerman, Inc.		JC	FMC, JP
Disinfectant Cleaner	Contract Cleaners Supply		JC	JP
Duco Cement	Devcon Corp.		LO	LP, FMC
Dursbar Lo	Humphreys Pest Control		Not Stored Here	V
Dyna-Solv Cleaner/Degreaser	Zimmerman, Inc.		MO, MR	FMC, JP
Encapsulated Natural Pyrethrum	Whitmire Research Labs, Inc.	*	Not Stored Here	V
Endust Cleaner	Drackett Products Co.		JC	JP
Expo White Board Cleaner 81803	Sanford Corp.	*	O	A
Expoxi Patch Kit 1C White	Hysol Division, The Dexter Co.		LO, MR	LP, FMC
Fast Draw Wire Pulling Lubricant	ITT Blackburn Co.	*	MR	LP
Fire Extinguishing General Carbon Dioxide	General Fire Extinguishing Corp.		FE	FB

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Fire Extinguishing Water	Norris Industries Fire & Safety Equipment Division		FE	FB
Flux-Off C-2490	Chemtronics, Inc.		LO	LP
Foam Scrub for Floors	3M Co.		MO	FMC, JP
Glare Sentry II Cleaner	Inmac		O	A
Freez-It #12	Chemtronics, Inc.		LO	LP
Green Submarine	Butcher Polish Co.	*	ME, JC	FMC
Grip Non-Skid Safety Coating	Bell Chemical Industries		MR	FMC
G.T.O. Solvent Spot Remover	Clausen Marketing Associates		JC	JP
HALON Fire Extinguishing Bromotrifluoromethane	Dupont		BG	FB
IGAS Joint Sealer	Sika Corp.		MR	LP
Imperial Scale Remover	Calgon Corp.		MR	FMC, V

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Industrial Strength Drain Opener	Zimmerman, Inc.		MO, ME	FMC
Instant Kleen All	Tech Spray	*	LO	FMC, LP
Jif-Y-Clean (Scotch Bright Pad)	Microtron Abrasives, Inc.		LO	LP, FMC
Krylon Crystal Clear Spray Coating 1301	Borden, Inc.	*	LO	FMC, LP
Krylon Electronic Protective Spray Coat	Borden, Inc.		LO	LP
Lectra Clean	CRC Chemicals	*	LO	LP
LPC Office Products Correction Fluid	Gillette Co., Paper Mate Div.	*	O	A
Lubrisil	Penetone Corp.	*	LO	LP
Lucas Solvent (Formula F-1091)	John Lucas & Co.		MR	FMC
M 300 Oil Free Dispersing Cleaner	M-Oil-Free Co.		LO	LP
MAB Brush & Roller Bath	MAB Paints		MR	FMC
MAB Paints	MAP Paints		MR	FMC

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Malathion ULV Concentrate Insecticide	American Cyanamid Co.	*	Not Stored Here	V
Marking Paint	Aervoe Pacific Co.	*	LO	LP
Methyl Ethyl Ketone			LO	LP
Methylene Chloride	Philips & Jacobs		LO	LP
Methylisobutyl Ketone			LO, MR	LP, FMC
Misty Mark Remover	Amrep, Inc.		JC	JP
Misty II Disinfectant & Deoderant	Amrep, Inc.		MO, CR	FMC, CO
Molykote 557 Lubricant	Dow Corning Corp.		X, CR, CS	CO, FMC
MS-220 Aero-Duster	Miller-Stephenson Chemical	*	LO	LP
Nalco #8256	Nalco Chemical Co.		MR	LP, FMC
Nybco Primer & Sealer	New York Bronze Powder Co.		MR	FMC
Orthene 75 S Soluble Powder	Chevron Environmental Health Center	*	Not Stored Here	V

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Otis Cleaning Compound No. 2	Otis Elevator		ER	V
Otis Inhibitor No. 3	Otis Elevator		ER	V
Otis Lubricant Oil No. 2	Otis Elevator		ER	V
Otis Lubraicant Oil No. 41	Otis Elevator		ER	V
Ozi Tape	Woodlets, Inc.		MR	FMC
Paco Solvent Denatured Alcohol	Publicker Industries		LO	LP
Paint Thinner 090-032	MAB Paints	*	MR	FMC
Pentac Aqua Flow	Zoecon Corp.	*	Not Stored Here	V
Pink Concentrate Detergent	Contract Cleaners Supply		JC	JP
Plast-N-Glas C8400/C6400	Chemtronics, Inc.	*	MO	FMC, JP
Plastic Spray Pearl White #634779	IBM		LO	LP, FMC
Premium Blue ISW-40 Diesel/Engine Oil	Cummins Engine Co., Inc.		MR	V. FMC

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Purple "K" Dry Chemical/Fire Extinguishing	General Fire Extinguishing Corp.		FE	FB
Quelpyre Mastic 7038	Quelcor, Inc., NG	*	MR	FMC
Rapid Tap Cutting Fluid	Relton Corp.		LO	LP, FMC
Recorder Ink Black - Fast Dry	Leeds & Northrup		LO, MR	LP
Recorder Ink Black - Slow Dry	Leeds & Northrup		LO, MR	LP
Recorder Paper Roll	IBM		CS	CO, LP, FMC, Dis
Red Hot Pellets Ice & Snow Melter (Calcium Chloride)	Chas. Schaefer		TR	FMC
Red Ink - General Purpose	Leeds & Northrup		LO, MR	LP
Red Wing Linseed Oil	Pittsburgh Plate Glass Co.		MR	FMC
Refrigerant - 11	National Refrigerants		MR	FMC, V
Relton's A-9 Cutting Fluid For Aluminum	Relto Corp.		LO	LP

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Round Up Herbicide	Monsanto Co.	*	Not Stored Here	V
Royal Cleaning Fluid 1	Royal Business Machines		XR	FMC, Secy
Rubber Cement	Dennison Manufacturing Co.		O	A
Rubber Cement #852	Carter's Ink Co.		O	A
Rust-O-Lastic Spray Enamel Wht. 125-1639	MAB Paints		LO	LP, FMC
Safer Agro-Chem's Insecticidal Soap Concentrate	E. C. Geiger	*	Not Stored Here	V
Salt - Cargill Super Soft Pellets	Cargill Salt Div.	*	MR	FMC
Sanford's Quick-Dry Stamp Pad Ink #580	Sanford Corp.		O	A
Scotchkote	Electro Products Division, 3M		LO	LP
Sedco P.V.C. Cement	Sedco Pipe Products, Inc.		LO	LP
Sehl-Safe Slip Resistant Treatment	Sehl International, Inc.	*	MO	FMC

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Sevin Brand 50 W Carbaryl Insecticide	Union Carbide Agricultural Products Co., Inc.	*	Not Stored Here	V
Shachihata Stamper Ink - Red,Black,Blue	Shachihata Products		O	A
Sik-A-Seal Vapor Barrier Coating #20003	Sika Corp.		MR	LP
Silazene Silicone Spray	Zimmerman, Inc.	*	MO	FMC, LP
Smoke Detector Tester	Home Safeguard Industries	*	LO	LP
Sodium Molybdate	Alex C. Fergusson Co.		MR	V
Storagetek Hub & Transport Cleaner Fluid	Startex Chemical, Inc.	*	X, CR, CS	CO, FMC
Strip All	Alpha Systems Unlimited	*	ME	FMC
Sunbonnet Lemon Wax	Butcher Polish Co.	*	MO	FMC, JP
Sundance Floor Cleaner	Butcher Polish Co.	*	ME, JC	FMC
Super Gloss Wax	Bullen Chemical Co.	*	JC	FMC, JP

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Super Husky Toilet Bowl Cleaner	Canberra, Corp.	X	JC	JP
Super Zene Bowl Cleaner	Canberra Corp.		MO, ME, JC	FMC
Superior Sno N Ice Melter	Chemopham Labs		TR	FMC
Swat Wasp & Hornet Spray	Zimmerman, Inc.		MO	FMC
Swell Lotionized Detergent	Epic Industries		MO	A
Tahitian Mist	Zimmerman, Inc.		MO	FMC
Texaco Capella Oil	Texaco, Inc.		MR	FMC
Texaco Rando Oil A	Texaco, Inc.		ER	V
The C-4 Brand Decays #363-45	Coopers Creek Chemical Corp.		MR	FMC
Trimec Broadleaf Herbicide	G Phi/Gordon Corp.	*	Not Stored Here	V
Tri-Flow	Costa Mesa Lubricants, Inc.		X, CR, CS	CO, FMC
Twinkle Cleaner & Polish	Drackett Products Co.		JC	JP

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Unbelieveable Stain Remover	Core Products Co., Inc.	*	MO	FMC, JP
Weldwood Contact Cement #0271	Roberts Consolidated		MR	FMC
Windex Glass Cleaner w/Ammonia D	Drackett Products Co.		MO, ME	FMC, JP, CO
Xerox Cleaning Solvent 43P78	Xerox Corp.		X, CR, CS	V
Xerox Developer 1045 Recorder #5R-111	Xerox Corp.	*	X, CR, CS	V
Xerox Developer 1075/1090 Recorder 5R302	Xerox Corp.	*	X, CR, CS	V
Xerox Developer 8700/9700	Xerox Corp.		X, CR, CS	V
Xerox Developer, Black, 1025	Xerox. Corp.		X, CR, CS	V
Xerox Drum Cleaner 6500/6200	Xerox Corp.		X, CR, CS	V
Xerox Dry Ink Plus 1040, 1045, 1048	Xerox Corp.		X, CR, CS	FMC, V, CO, Secy
Xerox Dry Ink Plus, Black, 1025/1038	Xerox Corp.		X, CR, CS	FMC, V, CO, Secy
Xerox Dry Ink 1075/1090 Recorder #6R301	Xerox Corp.		X, CR, CS	FMC, V, CO, Secy

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

Product Name	Manufacturer	MSDS R'cd	Storage Area	People Involved
Xerox Dry Ink 8700/9700	Xerox Corp.		X, CR, CS	FMC, V, CO, Secy
Xerox Film Remover	Xerox Corp.		X, CR, CS	V
Xerox Fuser Lubricant Recorder #8R983	Xerox Corp.		X, CR, CS	V
Xerox Formula A Cleaner #43P48	Xerox Corp.	*	X, CR, CS	V
Xerox Formula A Cleaner #43P49	Xerox Corp.		X, CR, CS	V
Xerox Lens & Mirror Cleaner 43P66	Xerox Corp.		X, CR, CS	V
Xerox Photoreceptor Pumice	Xerox Corp.		X, CR, CS	V
Zinc-It #2081 Cold Galvanizing Coating	CRC Chemicals	*	MR	FMC, LP

WEW/dlw/4981G

Storage Area
BG - Below Grade
CR - Computer Room
CS - Computer Supply Room
ER - Elevator Room
FE - Fire Extinguisher
JC - Janitorial Closet (Basement, First Floor, Camera Room)
LO - Lab Office
ME - Mezzanine (Water Room)
MO - Maintenance Office
MR - Mechanical Office
O - Office Wide
TR - Trash Room
X - Xerox Room

People Involved
A - All Personnel
CO - Computer Operators
Disp - Dispatchers
FB - Fire Brigade
FMC - Facilities Maintenance
JP - Janitorial Personnel
LP - Lab Personnel
Secy - Secretaries (also includes Office Services)
V - Vendor

10/21/87

8709048

ATTACHMENT C

AMERICAN
INDUSTRIAL
WASTE

A Division of ENSCO • 5900 B Cockrill Bend Road • Nashville, TN 37209 • (615) 383-1691 / (615) 383-169.

December 27, 1982

Philadelphia Electric Company
2301 Market St.
Philadelphia, Pa

Attention: Jim Chuplin

Dear Mr Chuplin,

Pleasd find enclosed the Original Generator's Copy of the Hazardous waste Manifest and the Hazardous Waste Bill of Lading for your company' shipment which arrived at Ensco(AWI), Nashville, Tennessee on December 18, 1982.

Sincerely,

Patty Harris

Patty Harris
AWI/Nashville

AR200949

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

#01

Shippers

Carriers

CARRIER: ENSCO SCAC Date 12/18/82

TO:
Consignee Ensco Incorporated
Street 1015 Louisiana St.
Destination Little Rock, AR Zip 72202

FROM:
Shipper Philadelphia Electric Company
Street 2301 Market St.
Origin Philadelphia, Pa Zip 19101

Route:

Vehicle Number

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS PROPER SHIPPING NAME)	HAZARD CLASS	ID Number	WEIGHT (subject to correction)	RATE	LABELS REQUIRED (or exemption)
2		Allis Chalmers Transformers			19,400		
		KVA 1000, Serial #5026503					
		and Serial #5026504					
		Received A.L. Billy Clark					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. Fee:
Prepaid ☒
Collect ☐ $

NOTE - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of Consignor)

FREIGHT CHARGES
☒ PREPAID ☐ COLLECT

RECEIVED subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

PLACARDS REQUIRED YES

PLACARDS SUPPLIED ☒ YES ☐ NO-FURNISHED BY CARRIER

DRIVER SIGNATURE:

SHIPPER: Philadelphia Electric Company
PER: [signature]
DATE: 12/17/82

CARRIER: Ensco Inc.
PER: Jesse Williams
DATE: 12-18-82

CONTAINS HAZARDOUS MATERIALS

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

AR200950

HAZARDOUS WASTE MANIFEST

ORIGINAL — NOT NEGOTIABLE

MANIFEST DOCUMENT NUMBER

SHIPPER NUMBER

Ensco
NAME OF CARRIER (SCAC)

CARRIER NUMBER

IDENTIFICATION

	12 DIGIT EPA ID #	COMPANY NAME, MAILING ADDRESS, AND TELEPHONE NUMBER	DATE SHIPPED OR RECEIVED
GENERATOR/ SHIPPER		Philadelphia Electric Company, 2301 Market Street, Philadelphia, Pa. 19101 (215-841-5256) ATTN: J C HUFFER	12/18/82
TRANSPORTER # 1		Ensco Incorporated, 1015 Louisiana Street, Little Rock, AR 72202 (501-375-8444)	
TRANSPORTER # 2 (if required)			
TSDF TREATMENT STORAGE OR DIS—POSAL FACILITY			
TSDF TREATMENT STORAGE OR DIS—POSAL FACILITY			

WASTE INFORMATION

NO. OF UNITS & CONTAINER TYPE	HM	EPA HAZ. WASTE ID #	DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203	UN # or NA #	EXEMPTION OR NO LABELS REQUIRED	FLASH POINT (IN °C) WHEN REQ'D	UNITS WT/VOL	TOTAL QUANTITY	RATE	CHARGES (For Carrier Use Only)
2			KVA 1000 Allis-Chalmers Transformers Serial #5026504 and Serial #5026503					2		

SPECIAL HANDLING INSTRUCTIONS

If an RQ commodity is spilled on a waterway or adjoining land the incident must be promptly reported to the Federal government at 1-800-424-8802 (toll free) or 202-426-2675 (toll call). If other DOT Hazardous Materials are discharged creating a serious situation, call shipper's telephone number or Chemtrec 1-800-424-9300 immediately.

COMMENTS

On "Collect on Delivery" shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. 1

PLACARDS TENDERED
Yes ☒ No ☐

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE
PREPAID ☒
COLLECT ☐ $

Note—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding.
$ _____ per _____

"If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."

_____ Signature

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

TOTAL CHARGES. $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collected

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the U.S. Environmental Protection Agency.

This is to certify acceptance of the hazardous waste shipment.

Jesse Williams 12-18-82
TRANSPORTER #1 SIGNATURE & DATE

TRANSPORTER #2 SIGNATURE & DATE (if required)

AR200951