

Appendix A
MSDSs for Cleaners Used and Tested at Participating Facilities

High VOC Cleaners Used at Participating Facilities

High VOC Cleaner Used at the San Bernardino Sun



PRESSROOM SOLUTIONS

4701 Martin St. Fort Worth, TX 76119
(817) 535-3898 • Fax: (817) 536-8556

HAZARD RATING	
LEAST	- 0
SLIGHT	- 1
MODERATE	- 2
HIGH	- 3
EXTREME	- 4

HEALTH	= 1
FIRE	= 2
REACTIVITY	= 0

MATERIAL SAFETY DATA SHEET

EMERGENCY PHONE NUMBER FOR CHEMTREC: 1-800-424-9300

TRANSPORTATION EMERGENCY NUMBER: 1-800-424-9300

PRODUCT NAME: BLANKET & ROLLER WASH

PRODUCT ID NUMBER: 5001-5

CHEMICAL NAME: N/A

SYNONYMS: N/A

MSDS REVISION DATE: 03/09/2000

Product Class: N/A CAS Number: N/A DOT Proper Shipping Name: Combustible Liquid, n.o.s., (Petroleum Distillates) DOT Identification Number: NA1997 VOC Content: 6.5 lb/gal (773 g/l) VOC Composite Partial Pressure, PP: 1.6 mm Hg @ 68°F	WARNING STATEMENT: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Keep away from heat. Keep containers closed. Use with adequate ventilation. FOR INDUSTRIAL USE ONLY Do not cut, grind, drill, or reuse any container that contained this product.
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SECTION 1 - HAZARDOUS INGREDIENTS

MATERIAL	CAS NUMBER	PEL/TLV	SOURCE
Aromatic hydrocarbons contains 1,2,4-Trimethylbenzene †	10 - 15% 3 - 5%	NE 25 ppm	ACGIH
Aliphatic hydrocarbons	65 - 90%	100 ppm	ACGIH

† Subject to the reporting requirements of Section 313 of SARA Title III.

SECTION 2 - EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT	Gently flush eyes with water for at least 15 minutes, while holding eyelids apart to ensure complete irrigation. Seek medical attention immediately.
SKIN CONTACT	Remove contaminated clothing and shoes. Wash affected areas with soap and water and seek medical attention if irritation persists.
INHALATION	If high vapor concentrations are encountered or breathing difficulties or light headedness occur, remove to fresh air. If breathing stops, give artificial respiration and seek medical attention immediately.
INGESTION	Do NOT induce vomiting. Seek medical attention immediately. If spontaneous vomiting occurs, keep head below hips to prevent aspiration of the liquid into the lungs.

PEL - Permissible Exposure Limit (OSHA) TLV - Threshold Limit Value (ACGIH) NE - Not Established N/A - Not Applicable
Federal law requires persons receiving this Material Safety Data Sheet to study it carefully and become aware of the hazards of the product involved. Notify your employees, visitors, agents, and contractors of the information on this sheet.

SECTION 3 - PHYSIOLOGICAL EFFECTS AND HEALTH INFORMATION

EYES	Eye contact with liquid and vapors may cause mild irritation. Prolonged or repeated eye contact may cause moderate to severe irritation and aggravate pre-existing conditions.
SKIN	May cause skin irritation. Prolonged or repeated exposure may defat the skin with burning, drying and cracking, and skin burns. May aggravate pre-existing skin conditions.
SYSTEMIC	Acute overexposure is possible by way of inhalation and ingestion and may lead to nasal and respiratory tract irritation, gastrointestinal disturbances including nausea and diarrhea, central nervous system (CNS) effects including headache, dizziness, fatigue, and unconsciousness, and respiratory failure. Swallowing even small amounts of this product may lead to aspiration pneumonitis, which is evidenced by cyanosis, and death. Chronic overexposure to this product may cause liver and kidney damage based on studies of laboratory animals.

SECTION 4 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION	If workplace exposure limits of any component is exceeded, the use of a NIOSH/MSHA-approved respirator is advised.		
VENTILATION	Provide sufficient local exhaust or general ventilation to maintain exposure below PEL's and TLV's.		
PROTECTIVE GLOVES	Recommended	EYE PROTECTION	Recommended
OTHER PROTECTIVE EQUIPMENT	To prevent repeated or prolonged skin contact, wear impervious clothing and boots. Accessibility to eye washes and safety showers in work areas is always recommended.		

SECTION 5 - REACTIVITY DATA

STABILITY	Stable	CONDITIONS TO AVOID	Heat, sparks, flames, and pilot lights
INCOMPATIBLE MATERIALS TO AVOID	Strong oxidizing agents		
HAZARDOUS DECOMPOSITION PRODUCTS	Thermal decomposition in the presence of air may potentially yield various hydrocarbons as well as oxides of carbon.		
HAZARDOUS POLYMERIZATION	Will not occur		

SECTION 6 - SPILL OR LEAK PROCEDURES

PRECAUTIONS IN CASE OF RELEASE OR SPILL	Keep away from any source of ignition. Wear protective equipment. Stop and/or contain discharge and ventilate area. Prevent from entering drains, sewers, or streams.
WASTE DISPOSAL METHOD	Pump or transfer spilled material to containers for recovery. Absorb unrecoverable product. Dispose of in accordance with applicable regulations.

SECTION 7 - STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS	Keep from sources of heat and ignition. Ground containers when transferring material. Store with adequate ventilation and keep containers closed when not in use.
OTHER PRECAUTIONS	Emptied containers may retain product residue; therefore, all hazard precautions given in this data sheet should be observed.

SECTION 8 - FIRE AND EXPLOSION HAZARD DATA

DOT HAZARD CLASSIFICATION	Combustible Class	FLASH POINT AND METHOD	>100°F by Setflash
LOWER EXPLOSIVE LIMIT	0.7% (approximate)	UPPER EXPLOSIVE LIMIT	7% (approximate)
EXTINGUISHING MEDIA	Use foam, CO ₂ , or dry chemical fire apparatus.		
UNUSUAL FIRE AND EXPLOSION HAZARDS	Vapors are heavier than air and may travel along the ground and be ignited by sources of heat, pilot lights, and other flames distant from the material handling point. Empty containers can also still provide a source of combustible vapors and ignite explosively.		
FIRE FIGHTING PROCEDURES	Fire fighters should wear self-contained breathing apparatus and chemical-resistant, protective clothing. Spraying water directly into fire may cause material to float on surface and become reignited. Water spray should be used to cool nearby containers and structures that are exposed to fire.		

SECTION 9 - PHYSICAL DATA

APPEARANCE	Clear, colorless liquid	pH (APPROXIMATE)	N/A
BOILING RANGE (APPROXIMATE)	300 - 360°F	VAPOR DENSITY	Heavier than air
WEIGHT LB. PER GALLON	6.5	EVAPORATION RATE	Slower than water
PERCENT VOLATILE INCLUDING WATER	100%	SOLUBILITY IN WATER	Negligible

SECTION 10 - DOCUMENTARY INFORMATION

PRODUCT NAME: BLANKET & ROLLER WASH

PRODUCT ID NUMBER: 5001-5

PREPARED BY: DAJ

APPROVED BY: PJF

MSDS REVISION DATE: 03/09/2000

The information contained in this data sheet is, to the best of our knowledge, accurate but is not warranted. All materials may present unknown health hazards and should be used with caution. It is the user's responsibility to evaluate the information in a prudent manner and to use it in a manner consistent with its purpose. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

High VOC Cleaner Used at J.S. Paluch

ALLIED HYDROWASH



MATERIAL SAFETY DATA SHEET

ALLIED PHOTO OFFSET SUPPLY CORPORATION
2040 LEE STREET
HOLLYWOOD, FL 33020

EFFECTIVE: AUGUST 22, 1996

I - PRODUCT IDENTIFICATION

MANUFACTURER'S NAME: ALLIED PHOTO OFFSET SUPPLY CORP.
ADDRESS: 2040 LEE STREET, HOLLYWOOD, FL 33020
PHONE NUMBER: (305) 923-9884
EMERGENCY PHONE NUMBER: 1-800-424-9300 CHEMTREC
TRADE NAME: ALLIED HYDROWASH
SYNONYMS: Blanket & Roller Cleaner for Lithographic Presses

II - HAZARDOUS INGREDIENTS

Material or Component	% Mass	Hazard Data
Aromatic Petroleum Distillates CAS#64742-95-6	50%	ACGIH (TWA-TLV) 100 PPM
(This ingredient contains: Xylene CAS#1330-20-7 2-5% *		ACGIH (TWA-TLV) 100 PPM
Cumene CAS#98-82-8 1-4% *		ACGIH (TWA-TLV) 50 PPM-SKIN
1,2,4-Trimethylbenzene CAS#95-63-6 24-29% *		Not Established
Aliphatic Petroleum Distillates CAS#64741-41-9	46%	ACGIH (TWA-TLV) 100 PPM
*These ingredients are subject to the reporting requirements of SARA 313 and 40 CFR 372.		

None of the ingredients present in the product are identified as carcinogenic or potentially carcinogenic by NTP, IARC or ACGIH.

All ingredients are listed in the U.S. TSCA inventory.

V - HEALTH HAZARD INFORMATION

HEALTH HAZARD DATA
ROUTES OF EXPOSURE:

INHALATION: High concentrations of vapors or mists may cause irritation of nose and throat, and signs of central nervous system depression e.g. headaches, drowsiness, loss of coordination, possible unconsciousness.

SKIN CONTACT: May cause skin irritation, redness, burning and drying.

SKIN ABSORPTION: Possible absorption on prolonged contact.

EYE CONTACT: Severe irritation, tearing, redness and swelling.

INGESTION: Irritation of digestive tract, signs of central nervous system depression. Material is an aspiration hazard.

EFFECTS OF:

ACUTE OVEREXPOSURE: All of the above.

CHRONIC OVEREXPOSURE: Prolonged and repeated overexposure to solvents have been associated with permanent brain and central nervous system damage.

EMERGENCY FIRST AID PROCEDURES

EYES: Flush eyes for 15 minutes holding eyelids apart. Seek medical attention.

SKIN: Wash affected areas with soap and water. Remove contaminated clothing and launder before reuse.

INHALATION: Remove to fresh air. If breathing difficulties occur, oxygen should be administered by trained personnel. If breathing stops begin artificial respiration. Seek immediate medical attention.

INGESTION: Do not induce vomiting. Material is an aspiration hazard and can enter lungs during swallowing or vomiting and cause lung damage. Seek immediate medical attention.

VI - REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY: Stable

INCOMPATIBILITY: Strong acids or bases, oxidizing agents, selected amines.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, various hydrocarbons.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: None

VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Ventilate area of spill. Extinguish all sources of ignition. Prevent spill from spreading. Large spill, pump material into containers. For small spill, absorb into inert absorbent and shovel into containers. Do not flush with water.

NEUTRALIZING CHEMICALS: None needed

WASTE DISPOSAL METHOD: Dispose of in accordance with all applicable local, county, state and federal regulations.

SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: Provide sufficient mechanical ventilation (general and/or local exhaust) to prevent exposure exceeding TLV and the irritating buildup of vapors.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY (Specify in Detail): Use NIOSH approved respirator where needed.

EYE: Chemical splash goggles.

GLOVES: Impermeable

OTHER CLOTHING AND EQUIPMENT: Safety apron, appropriate work clothes to prevent repeated skin contact; eyewash station, drench shower.

SPECIAL PRECAUTIONS

This is an industrial product and should be used by trained personnel only.

Containers of this material may be hazardous even when emptied, since containers retain product residue. Follow all hazard warnings given in this data sheet even after container is emptied.

Do not breathe vapors. Use with adequate ventilation.

SPECIAL PRECAUTIONS, CONT.

Avoid prolonged skin contact. Wash thoroughly after handling.

Do not get in eyes. Wear appropriate eye protection. Material will cause severe eye irritation.

Do not ingest.

Keep away from heat sparks and open flame.

STORAGE REQUIREMENTS

Keep container tightly closed when not in use.

Store in cool, dry place.

Store as COMBUSTIBLE MATERIAL.

Keep away from heat sparks and open flame.

SHIPPING REQUIREMENTS.

DOT Shipping Name: Combustible Liquid NUS
(Contains: Petroleum Distillates)

I.D. # : KA1993

The above information is believed to be correct as of the date hereof and is based on data supplied by raw material suppliers, however, no warranty of merchantability, fitness for any use, or any other warranty is expressed or is to be implied regarding the accuracy of these data, the results to be obtained from the use of the material, or the hazards connected with each use. 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 responsibility for the results of its' use. This information is furnished on the condition that the person receiving it shall make his own determination as to the suitability of the material for his particular purpose and on the condition that he assume risk of his use thereof.

High VOC Roller Cleaner Used at Nelson Nameplate

A.G. LAYNE, INC.

Shell Oil & Chemical Jobbers
LEE CHEMICAL CO.
4578 Brazil Street
Los Angeles, CA 90039
(323) 245-2345 • FAX (818) 242-7804

Use:
~~Reduced~~ to 1 with water

AA
AA

MATERIAL SAFETY DATA SHEETS

ISSUE DATE: 8/1/98

PAGE 1

Health Emergencies: Call Los Angeles Poison Information Center (24 hrs.):
(800) 777-0476 or (714) 634-5988 in Orange County

PRODUCT IDENTIFICATION

Product name: H Y D R O C L E A N
A Water-Activated Power Cleaner for Lithographic Presses
Generic Name: Water Miscible Solvent Blend
DOT Proper:
Spill Name: Paint Related Material
ID Number: UN-1203
Classification: Combustible Liquid, PG III

SCAQMD INFORMATION

The VOC for This Product Before Adding Water is:
80% by Mass or
795 Grams/Liter or 6.62 Pounds/Gallon

VOC Composite Partial Pressure
(Vapor Pressure):
2.0 mm Hg @ 20 Degs. C

SECTION 1 - HAZARDOUS INGREDIENTS/EXPOSURE LIMITS

HAZARDOUS INGREDIENTS	CAS NUMBERS	TLV/PEL	UNITS	AGENCY	TYPE
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This is an industrial product and should only be used or handled by trained personnel.

MINERAL SPIRITS

Hydrotreated Distillate, Light (Comparable to Stoddard Solvent)	04742-47-8 8062-41-3
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See Stoddard Solvent					
100	PPM	OSHA	TWA		
100	PPM	ACGIH	TWA		
100	PPM	MSHA	TWA		
200	PPM	MSHA	STEL		
100	PPM	CAL OSHA	TWA		

SECTION 1 - CONTINUED - HAZARDOUS INGREDIENTS/EXPOSURE LIMITS

HAZARDOUS INGREDIENTS	CAS NUMBERS	TLV/PEL UNITS	AGENCY	TYPE
AROMATIC HYDROCARBON	64742-95-6	NONE		
Xylene	1330-20-7	100 PPM 100 PPM 150 PPM 150 PPM 200 PPM 100 SKIN PPM 300 SKIN PPM 100 PPM	OSHA ACGIH ACGIH OSHA CAL OSHA CAL OSHA CAL OSHA MSHA	TWA TWA STEL STEL EXCUR TWA CEIL TWA
1,3,5-Trimethylbenzene	108-67-8	No Exposure Limits Established		
1,2,4-Trimethylbenzene	95-63-6	No Exposure Limits Established		
Isopropylbenzene	98-82-8	50 SKIN PPM 50 SKIN PPM	ACGIH OSHA	TWA TWA

SECTION 1A- This product contains the following chemicals subject to the reporting requirements of SARA 313 AND 40CFR 372.65:

Listed ingredients	CAS Numbers	Percent Range
Xylene	1330-20-7	2.20 %
1,2,4-Trimethylbenzene	95-63-6	11.0 %
Isopropylbenzene	98-82-8	1.66 %

SECTION 1B - SARA SECTIONS 311/312 HAZARD RATINGS

This product is rated as a fire hazard under the reporting requirements of SARA 311 and 312. The health hazard category for this product under SARA Sections 311/312 reporting meets both immediate (acute) and delayed (chronic) definitions. Discharge to the environment including the sewer may be reportable (under the regulations of CERCLA/DOE) to the National Response Center, (800) 424-8802. Protection of stratospheric ozone (pursuant to Section 611 of the Clean Air Act Amendments of 1990) per 40 CFR Part 82: This product does not contain nor was it directly manufactured with any Class I or Class II ozone-depleting substances.

CALIFORNIA PROPOSITION 65 WARNING

This product contains detectable amounts of substances known to the State of California to cause cancer, birth defects, or other reproductive harm.

SECTION II - EMERGENCY AND FIRST AID PROCEDURES

****EMERGENCY****

Have a physician call Los Angeles Poison
Information Center (24hrs.): 800-777-6476
Orange County Poison Center: 714-634-5988

EYE CONTACT:

Move victim away from exposure and into fresh air. If irritation or redness develops, flush eyes gently with clean water and seek medical attention. For direct contact, hold eyelids apart and flush the affected eye(s) with clean water for at least 15 minutes--seek medical attention.

SKIN CONTACT:

Immediately flush affected area(s) with large amounts of water while removing contaminated shoes, clothing, and constrictive jewelry. If skin surface is damaged, apply a clean dressing and seek immediate medical attention. If skin surface is not damaged, cleanse the affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek immediate medical attention.

INHALATION (BREATHING):

Immediately move victim away from source of exposure and into fresh air. If respiratory symptoms or other symptoms of exposure develop, seek immediate medical attention. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INGESTION (SWALLOWING):

******SEEK EMERGENCY MEDICAL ATTENTION******If victim is drowsy or unconscious, place on left side with head down, and do not give anything by mouth. *****DO NOT INDUCE VOMITING*****If vomiting occurs spontaneously, keep head below hips. Vomiting should only be induced under the direction of a physician or poison control center. Do not leave victim unattended.

SECTION III - HEALTH HAZARDS/ROUTES OF ENTRY

EYE CONTACT:

One or more components of this material is an eye irritant. Direct contact with the liquid or exposure to its vapors or mists may cause stinging, tearing, redness, and swelling

SKIN CONTACT:

One or more components of this material may cause skin irritation. Prolonged or repeated skin contact may cause redness, burning, drying and cracking of the skin, and skin damage. Please use protective gloves.

SKIN ABSORPTION:

Skin contact may be harmful. Contact may result in skin absorption. This material may be toxic when absorbed through the skin. Persons with pre-existing skin disorders or sensitive skin may be more susceptible to the effects of this material.

INHALATION (BREATHING):

Do not breathe vapors; use adequate ventilation.

This material has a low degree of toxicity by inhalation. Breathing high concentrations of vapors or mists may cause:

Irritation of the nose and throat.

Signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, fatigue, and nausea).

Prolonged or repeated exposure to vapors or mists may cause:

Liver and/or kidney damage.

Respiratory symptoms associated with pre-existing lung disorders (e.g., asthma-like conditions) may be aggravated by exposure to this material.

Refer to Section I for proper Threshold Limit Values (TLV).

SECTION III - CONTINUED - HEALTH HAZARDS/ROUTES OF ENTRY

INGESTION (SWALLOWING):

Ingestion of this material may cause irritation of the digestive tract, nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, and fatigue), nausea, vomiting, and diarrhea.

ASPIRATION HAZARD:

One or more components of this material can enter the lungs during swallowing or vomiting and cause lung inflammation, lung damage, or chemical pneumonia.

TARGET ORGAN EFFECTS/DEVELOPMENTAL INFORMATION/CANCER INFORMATION:

Pre-existing heart, blood, eye, skin, kidney, liver, lung or respiratory, spleen, or testis disorders may be aggravated by exposure to this material. This material (or a component) has been shown to lower activity of certain immune system cells in experimental animals. Exposure to this material (or a component) has been found to cause kidney damage in male rats. Overexposure to this material (or a component) has been suggested as a cause to the following in laboratory animals: liver abnormalities, blood abnormalities, cataracts, cardiac sensitization, hearing damage, kidney damage. The significance of these animal studies to human health is uncertain. Overexposure to this material (or a component) has been suggested as a cause to the following in humans: liver abnormalities. This material (or a component) has been shown to cause birth defects in laboratory animal studies. Harm to the fetus occurred only at exposure levels that harmed the pregnant animal. The significance of these animal studies to human development is uncertain. Based on available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

WARNING:

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage (sometimes called Solvent or Painters' Syndrome). Intentional misuse by deliberately concentrating and inhaling the contents of this product may be harmful or fatal.

SECTION IV - SPECIAL PROTECTION INFORMATION

VENTILATION:

If current ventilation practices are not adequate to maintain airborne concentrations below established exposure limits (see Section I), additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

RESPIRATORY PROTECTION:

The use of respiratory protection is advised when concentrations exceed the established exposure limits (see Section I). Depending on the airborne concentration, use a respirator or gas mask with approved cartridges and canisters (NIOSH approved, if available) or supplied air equipment.

PROTECTIVE GLOVES:

The use of gloves impermeable to the specific material handled is strongly advised to prevent skin contact and possible skin irritation and damage.

EYE PROTECTION:

Approved eye protection to safeguard against potential eye contact, irritation, or injury is strongly recommended.

OTHER PROTECTIVE EQUIPMENT:

It is suggested that a source of clean water be available in the work area for flushing eyes and skin. Special safety stations and equipment are available for this purpose. Impervious clothing should be worn as needed.

SECTION V - REACTIVITY DATA

STABILITY:

This product is stable.

INCOMPATIBILITY (MATERIALS TO AVOID):

This product forms combustible and/or explosive mixtures with air and/or oxygen. This product is incompatible with oxidizing agents, strong acids or bases, or selected amines.

HAZARDOUS POLYMERIZATION:

Hazardous polymerization will not occur.

SECTION VI - SPILL OR LEAK PROCEDURES

PRECAUTIONS IN CASE OF RELEASE OR SPILL:

Keep all sources of ignition and hot metal surfaces away from spill/release. Stay upwind and away from spill/release. Isolate hazard area and limit entry to emergency crew. Stop spill/release if it can be done without risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section IV). Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Dike far ahead of spill/release for later recovery or disposal. Spilled material may be absorbed into suitable absorbent material. Immediate cleanup of any spill/release is recommended. Notify appropriate federal, state, and local agencies. Discharge to the environment including the sewer may be reportable (under the regulations of CERCLA/DOT) to the National Response Center; (800) 424-8802.

WASTE DISPOSAL METHOD:

Product waste is considered hazardous and must be disposed of in accordance with local, county, state, and federal regulations.

SECTION VII - STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS:

Keep containers tightly closed. Keep containers cool, dry, and away from sources of ignition. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with this product. Containers of this material may be hazardous when emptied. Since emptied containers retain product residue (vapor, liquid, or solid), all hazard precautions given in this MSDS must be observed. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose product containers to heat, flame, sparks, or other sources of ignition; they may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. Other containers should be disposed of in an environmentally safe manner and in accordance with government regulations. All five-gallon pails and larger containers must be grounded and/or bonded when transferring material. Hydrocarbon solvents are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering, or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable and combustible liquids. To prevent "autoignition," any use of this product in an elevated temperature or pressure process should be thoroughly evaluated to establish and maintain safe operating conditions. All of the information contained in these pages applies to rags, sponges, or other materials that are used to hold this material.

SECTION VIII - FIRE AND EXPLOSION HAZARD DATA

NFPA HAZARD CLASS		HAZARD RANKING	HMIS HAZARD CLASS	
HEALTH HAZARD:	1	0 = LEAST	HEALTH HAZARD:	2
FLAMMABILITY:	2	1 = SLIGHT	FLAMMABILITY:	2
REACTIVITY:	0	2 = MODERATE	REACTIVITY:	0
OTHER:	---	3 = HIGH	PERSONAL	
		4 = EXTREME	PROTECTION:	B
		B = GLASSES & GLOVES		

Lower - Upper Explosive Limit (% Vol.): Unknown

Est. Flash Point (Deg. Fahr.): 107

EXTINGUISHING MEDIA:

Extinguish with dry chemical, CO₂, or a universal type foam.

FIRE AND EXPLOSION HAZARDS:

This material is combustible. This material readily gives off vapors that may travel long distances from their source by air currents or by ventilation equipment. These vapors may be ignited by heat, flame, spark, smoking, electric motors, or other sources of ignition far from their source. If container is not properly cooled, it may explode in the heat of a fire.

FIRE FIGHTING PROCEDURES:

Wear a SCBA with a full facepiece operated in the positive pressure demand mode with appropriate turnout gear and chemical resistant personal protective equipment. Water spray may be useful in minimizing vapors and cooling containers exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes. Vapors are heavier than air and will collect in low areas. Vapors may travel by air currents and ignite at a distance from container or spill.

SECTION IX - PHYSICAL DATA

APPROXIMATE BOILING POINT (Initial):
307 - 389 Degrees F.

RELATIVE EVAPORATION RATE (N-Butyl Acetate=1):
.30 (Approximate)

VAPOR PRESSURE:
2.6 mm Hg @ 20 Degrees C

VAPOR DENSITY (Air = 1):
4.8 (Heavier Than Air)

SPECIFIC GRAVITY:
.827

SOLUBILITY IN WATER:
Slight

ODOR:
Characteristic Solvent Odor

APPEARANCE:
Clear, light-colored, mobile liquid

Disclaimer of Expressed and Implied Warranties

The information in this document has been carefully prepared and is believed to be correct as of the date issued. Because Star Products, Dist'rs., does not make its products, qualified experts from the chemical suppliers and manufacturers to Star Products, Dist'rs., furnished the information and opinions expressed herein. No warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is implied regarding the accuracy or completeness of this information, the results obtained from the use of this information and the product, or the safety of this product and the hazards related to its use. This information and the product are furnished on the condition that the person(s) receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof. Please study this Material Safety Data Sheet carefully and become aware of the information it contains. There are specific federal laws on the responsibilities of purchasers and users of chemicals.

High VOC Blanket Cleaner Used at Nelson Nameplate

LOW VOC 1.68 BLANKET WASH



A. G. Layne, Inc.

MATERIAL SAFETY DATA SHEET

Date Prepared: August 10, 1996

NFPA Ratings:
 H F R S
 1 3 0 --

Material Safety Data Sheet

SECTION I - COMPANY IDENTIFICATION

Manufacturer:
 A. G. Layne, Inc.
 4578 Brazil Street
 Los Angeles, California 90039

Telephone Numbers:
 Office (213) 245-2345
 24 Hour Emergency Contact:
 Chemtrec (800) 424-9300

SECTION II - HAZARDOUS INGREDIENTS

OSHA Hazardous Components (29 CFR 1910.1200)		EXPOSURE LIMITS: 8 HR. TWA	
	(CAS#)	OSHA PEL	ACGIH TLV
Acetone	67-64-1	750 ppm	750 ppm
Solvent Naphtha, light aliphatic	64742-89-8	300 ppm*	300 ppm*
Xylene	1330-20-7	100 ppm	100 ppm
Solvent Naphtha, light aromatic	64742-95-6		
1,2,4-Trimethylbenzene	95-63-6	25 ppm	25 ppm

*recommend exposure limits of VM&P Naphtha as guideline

SECTION III - HAZARDS IDENTIFICATIONS

EMERGENCY OVERVIEW: DANGER! High exposures can cause nausea, vomiting, narcosis, and central nervous system (CNS) depression. Liquid may irritate skin and eyes. Mist may irritate mucous membranes and respiratory system.

POTENTIAL HEALTH EFFECTS:

- INHALATION:** Inhalation of high vapor concentrations may cause central nervous system (CNS) depression. Symptoms of CNS depression include: giddiness, headache, dizziness, and nausea; in extreme cases unconsciousness and death may occur. Aspiration of the liquid must be avoided as even small quantities may result in aspiration pneumonitis.
- EYE CONTACT:** Liquid severely irritates the eyes. High vapor concentrations irritate the eyes. Preexisting eye disorders may be aggravated by exposure.
- SKIN CONTACT:** Liquid irritates the skin. Prolonged contact can cause defatting and drying of the skin. Preexisting skin disorders may be aggravated by exposure.

LOW VOC 1.68 BLANKET WASH

- INGESTION:** Ingestion may cause vomiting and central nervous system (CNS) depression. Symptoms of CNS depression include: giddiness, headache, dizziness, and nausea; in extreme cases unconsciousness and death may occur.
- CHRONIC:** None known.
- CARCINOGENICITY:** LISTED IN NTP? No IARC? No OSHA Regulated? No

SECTION IV - FIRST AID MEASURES

- INHALATION:** Remove to fresh air. Supply oxygen if breathing is difficult. If not breathing, apply artificial respiration. Get medical attention.
- EYE CONTACT:** Flush with large amounts of running water for 15 minutes, while holding eyelids open. Get medical attention.
- SKIN CONTACT:** Remove contaminated clothing or shoes. Flush skin with water. Follow by washing with soap and water. Seek medical advice if irritation develops.
- INGESTION:** Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Get medical attention immediately.

SECTION V - FIRE FIGHTING MEASURES

- Flashpoint (Method):** 0° F (Flashpoint of lowest flashing component)
- Flammable Limits:** Lower: NE Upper: NE
- Autoignition Temperature:** NE
- GENERAL HAZARD:** DANGER! Extremely flammable. Clear area of unprotected personnel and isolate. Vapors are denser than air, flashback along vapor trail may occur. Vapor may explode if ignited in enclosed space. Product components will float and can be reignited on surface of water.
- FIRE FIGHTING INSTRUCTIONS:** Approach fire from upwind side. Avoid breathing smoke, fumes, mist, or vapors. Firefighters wear protective clothing, and self contained breathing apparatus.
- EXTINGUISHING MEDIA:** Use extinguishing media such as foam, dry chemical, carbon dioxide, or water fog. Water in straight hose stream may scatter product and spread the fire. Cool containers exposed to heat with water to prevent vapor pressure buildup leading to container rupture.
- HAZARDOUS COMBUSTION PRODUCTS:** Acrid smoke, irritating fumes, carbon monoxide, carbon dioxide and unidentified organic compounds

SECTION VI - ACCIDENTAL RELEASE MEASURES

- DANGER!** Extremely flammable. Keep unnecessary and unprotected people away. Isolate hazard area. Eliminate all ignition sources. Handling equipment should be grounded to prevent sparks. Stay upwind.
- LARGE SPILL:** Wear appropriate respirator and protective clothing. Shut off source of leak if safe to do so. Dike and contain. Water fog may be useful in suppressing vapor cloud. Keep spills and cleaning runoff out of municipal sewers and open waterways. Collect free product with vacuum truck or pump to storage container. Absorb residue with inert material, then place waste in a chemical waste container for disposal. Flush area with water to remove trace residue; dispose of flush solution as above.

LOW VOC 1.68 BLANKET WASH

SMALL SPILL: Absorb product with inert material, then place waste in a chemical waste container for disposal. Seal waste container for proper disposal.

SECTION VII - HANDLING AND STORAGE

Keep liquid away from heat, sparks, and flame. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment.

Use with adequate ventilation. Prevent vapor accumulation. Keep containers closed when not in use. Containers, even emptied, will retain product residue and can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them.

Avoid prolonged or repeated breathing of mist or vapors. Do not get into eyes or on skin. Do not swallow. Wash hands thoroughly after handling material and before eating, drinking, smoking, or using restroom facilities.

Store in a cool, dry place away from oxidizers and oxidizing agents.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Explosion - proof ventilation is recommended.

PERSONAL PROTECTION: Not normally needed under proper conditions of use and storage. If exposure may or does exceed occupational exposure limits use a NIOSH approved respirator.

PROTECTIVE CLOTHING: Avoid contact with eyes; use chemical goggles to protect eyes if contact is likely. Wear chemical resistant gloves and other clothing as required to minimize contact. Air dry contaminated clothing in well-ventilated space, then launder before reusing.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	160 mm Hg @ 100°F (est.)	Vapor Density (Air=1):	>2
Specific Gravity:	0.8	Evaporation Rate	
Solubility in Water:	NE	(n-Butyl Acetate=1):	NE
pH:	NE	Freezing Point:	NE
Boiling Point:	NE	VOC: 1.6 lb./gal. (calc.)	
Appearance & Odor:	Clear, colorless liquid with hydrocarbon odor.		

SECTION X - STABILITY AND REACTIVITY

GENERAL: Stable

INCOMPATIBLE MATERIALS: Strong oxidizing agents.

CONDITIONS TO AVOID: Avoid heat, sparks and flame. Avoid vapor accumulation.

HAZARDOUS POLYMERIZATION: Will not occur.

LOW VOC 1.68 BLANKET WASH

SECTION XI - TOXICOLOGICAL INFORMATION

Acetone	CAS# 67-64-1	TD _{LO} : 2857 mg/kg (oral - man) TD _{LO} : 10 mg/m ³ /6h (inhalation - man)
Solvent Naphtha, light aliphatic	CAS# 64742-89-8	LD ₅₀ : >8 ml/kg (oral - rat)
Xylene	CAS# 1330-20-7	LD ₅₀ : 4.3 g/kg (oral - rat)
Solvent naphtha, light aromatic	CAS# 64742-95-6	LD ₅₀ : 4.7 g/kg (oral - rat)

SECTION XII - ECOLOGICAL INFORMATION

Acetone	CAS# 67-64-1	14,250 ppm/24 h/sunfish/lethal/tap water 13,000 ppm/48 h/mosquito fish/TL ₅₀ /turbid water
Xylene	CAS# 1330-20-7	22 ppm/96 hr/bluegill/TL ₅₀ /fresh water Solvent

SECTION XIII - DISPOSAL CONSIDERATIONS

Classification and documentation is required before disposing of this product. If the product becomes a waste material, it may be an ignitable hazardous waste.

Follow all local, state, and federal regulations regarding proper disposal.

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	Flammable Liquids, n.o.s., (Acetone, Petroleum Distillates), 3, UN1993, PG II
HAZARD CLASS:	3
IDENTIFICATION NUMBER:	UN1993
DOT Emergency Guide #:	123
Reportable Quantity (RQ):	5000 lb. acetone

SECTION XV - REGULATORY INFORMATION

TSCA (Toxic Substance Control Act):

The components of this product are listed on the TSCA Inventory.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act):

Reportable quantity from release or spill: 5000 lb. acetone

CWA (Clean Water Act, Section 311):

Components of this product are considered oils. Spills into or leading into surface waters that cause a sheen must be reported to the National Response Center, (800) 424-8802

SARA TITLE III (Superfund Amendments and Reauthorization Act):

311/312 Hazard Categories: acute, chronic, ignitable

313 Reportable Ingredients: Xylene (CAS# 1330-20-7) - 1-2%
1,2,4-Trimethylbenzene (CAS# 95-63-6) - 2%

STATE REQUIREMENTS:

Benzene (CAS# 71-43-2), Cumene (CAS# 98-82-8), Toluene (CAS 108-88-3), Acetone (CAS# 67-44-1), and Xylene (CAS# 1330-20-7) are regulated by CA, CT, FL, IL, LA, MA, ME, MN, NJ, PA, and RI. Other states may also have special requirements. This product contains less than 10 ppm benzene and less than 0.3% cumene.

1,2,4-trimethylbenzene (CAS# 95-63-6) is regulated by CA, MA, MN, PA, and NJ. Other states may also have special requirements.

LOW VOC 1.68 BLANKET WASH

Other components of this product may be also be subject to state regulations. For details on specific state requirements, contact the appropriate agency in your state.

CALIF. PROP. 65: This product contains the following chemicals known to the State of California to cause cancer, birth defects, and/or reproductive harm: Benzene.

SECTION XVI - OTHER INFORMATION

PREPARED BY: TALEM, Inc. - Engineering & Consulting Services

(817) 335 - 1186

INFORMATION SUPPLIED BY: A. G. Layne, Inc.

PREPARATION DATE: 08/96

REVISED 9/96: Section XIV - Proper Shipping Name

FOOTNOTES:

NA - Not Applicable NE - Data Not Established CS - Cancer Suspect Agent OX - Oxidizer ND - No Data Cor - Corrosive
CALC - Calculated EST - Estimated STEL - Short Term Exposure Limit TLV - Threshold Limit Value
PEL - Permissible Exposure Limit TWA - Time Weighted Average, 8 hours

THE INFORMATION RELATES TO THIS SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY ONESELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE. NEITHER THE SELLER NOR PREPARER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE INFORMATION PRESENTED.

High VOC Cleaner Used at PIP Printing

MATERIAL SAFETY DATA SHEET

1 C Company Co.
120 E 163rd St. P.O. Box 66, Gardena, CA 90248
(310) 322-6210

HAZARD RATING
 Eye 2
 Health 2
 Flammability 0
 Reactivity 0
 Least = 0 Slight = 1 Moderate = 2 High = 3 Extreme = 4

Date Printed: November 18, 2001
 PRODUCT NAME: 1C-A11-PRO
 CHEMICAL NAME: A proprietary blend containing aliphatic/aromatic petroleum distillates, glycol ethers, esters and other diluents
 CHEMICAL FAMILY: Hydrocarbons and Glycol Ether Solvent

I. PHYSICAL DATA

BOILING POINT (760 mm Hg): 200° F FREEZING POINT: NA
 SPECIFIC GRAVITY (40°C): 0.817 VAPOR PRESSURE @ 20° C: 3.1 mm Hg
 VAPOR DENSITY (AIR=1): 3.9 SOLUBLE IN HB: Part Soluble
 % VOLATILES (BY VOLUME): 99 EVAP. RATE (GHT. ACET.=1): .1
 APPEARANCE AND ODOR: Clear liquid with mild odor
 V.P.C. (lb/gal): 6.6

II. HAZARDOUS INGREDIENT / COMPOSITION

MATERIAL	CAS NO.	TLV UNITS
A. Menthyl Spirits	64742-86-7*	:00
B. Aromatic Hydrocarbon Distillates	64742-85-6	:25
C. 2-Propoxyethanol	1097-20-9	N/A

* A combination of complex hydrocarbons; exact composition will vary

III. ACUTE TOXICITY DATA

MAT. NO.	ACUTE ORAL LD50	ACUTE INHALATION LD50	ACUTE INHALATION DATA
1A	>25 mg/kg (rat)	>1 ml/kg (rabbit)	>700 ppm/4hr (rat)
1B	>4.7 mg/kg (rat)	>4 ml/kg (rat)	>3570 ppm/4hr (rat)
1C	>3.3 mg/kg (rat)	>1.3 ml/kg (rabbit)	>2132 ppm/4hr (rat)

IV. HEALTH INFORMATION

The health effects listed below are consistent with requirements under the OSHA Hazard Communication Standard 29 CFR 1910.1200
A. Eye Contact: Liquid is irritating to the eye under normal vapor concentration. This material may cause eye irritation (burning, stinging and redness).
B. Skin Contact: Liquid is slightly irritating to the skin. Prolonged or repeated liquid contact can result in redness and/or drying of the skin which may result in skin irritation and/or dermatitis

other symptoms of toxicity as described in effects if ingestion
C. Inhalation: Vapors may be irritating to the eyes, nose, throat and respiratory tract. High vapor concentrations may cause CNS depression, headache, nausea, vomiting, weakness
D. Ingestion: Ingestion of product may induce vomiting. Aspiration (breathing) of vapors into the lungs must be avoided as even small quantities may result in aspiration pneumonia. Ingestion may also cause CNS depression, headache, nausea and drowsiness, and dizziness
E. Signs and Symptoms: Irritation as noted above. Slight to moderate CNS (Central Nervous System) depression may be evidenced by giddiness, headache, dizziness and nausea. Aspiration pneumonia may be evidenced by coughing, labored breathing and cyanosis (bluish skin). In severe cases, death may occur.
F. Recommended Medical Conditions: Pre-existing eye, skin, and respiratory disorders may be aggravated by exposure to this product.

V. OCCUPATIONAL EXPOSURE LIMITS

NO.	PEL/TWA	REL. CONC.	MA/TWA	TLV/TWA
A.	100 ppm	N/A	100 ppm	N/A
B.*	25 ppm	N/A	25 ppm	N/A
C.	NA	N/A	N/A	N/A

*TLV information provided for the Trimehylbenzene component only. No data available for the mixture as a whole.

VI. EMERGENCY AND FIRST AID PROCEDURES

A. Eye Contact: Immediately flush eyes with plenty of water for 15 minutes while holding eyelids open. Do not let victims rub their eyes. Get medical attention.
B. Skin Contact: Remove contaminated clothing and shoes. Flush skin with water. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.
C. Inhalation: Remove victims to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention immediately.
D. Ingestion: **DO NOT INDUCE VOMITING.** If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

VII. FIRE AND EXPLOSION HAZARDS

A. Flash Point and Method: 103° F (TCO)
B. Eliminate Liquid / % by Volume in Air: LEL (Lower Expl. Limit) = 1; UEL (Upper Expl. Limit) = 7
C. Extinguishing Media: Use water fog, foam, dry chemical or CO2. Do not use a direct stream of water. Product will float and can be re-ignited on surface of water.
D. Special Firefighting Precautions and Precautions: CAUTION. CONDUCTIBLE. Do not enter confined fire space without full bunker gear, including a positive pressure NIOSH approved self contained breathing apparatus. Cool fire exposed containers with water.

VIII. REACTIVITY

A. Stability: Stable
B. Hazardous Polymerization: Will not occur
C. Conditions and Materials to Avoid: Avoid heat, flame and contact with strong oxidizing agents.
D. Hazardous Decomposition Products: Carbon dioxide, carbon monoxide and un(identified) organic compounds may be formed during combustion.

16. ALL PRO

IX. EMPLOYEE PROTECTION

- A. **Respiratory Protection:** Avoid prolonged or repeated breathing of vapors. In accord with 29 CFR 1910.134, use either an, a, or an air-purifying respirator or an air-purifying respirator for organic vapors.
- B. **Protective Clothing:** Avoid contact with eyes. Wear safety glasses or goggles as appropriate. Avoid prolonged or repeated contact with skin. Wear chemical resistant gloves (butyl rubber) and other clothing to minimize contact.
- C. **Additional Protective Measures (Engineering):** Use explosion proof ventilation as required to control vapor concentrations. Clean contaminated clothing before reusing.

X. ENVIRONMENTAL PROTECTION

- A. **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 / recovery 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 areas 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.
- B. **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 the latest EPA or State regulations regarding proper disposal.
- C. **Environmental Hazards:** Under EPA-CWA, this product is classified as an oil under section 311. Spills into or landing on surface waters that cause a sheen must be reported to the National Response Center, 1-800-424-8802.
- EPA-Comprehensive Environmental Response, Compensation and Liability Act, Under EPA-CEMCLA (Superfund), releases to air, land or water may be reportable to the National Response Center, 1-800-424-8802 (circumstances surrounding the release and cleanup determine reportability).

XI. SPECIAL PRECAUTIONS

- A. Keep liquid and vapors away from heat, sparks and flame. Keep containers closed when not in use. Use with adequate ventilation.
- B. Contractors, even though, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.
- C. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer equipment and containers.

XII. OTHER REGULATORY INFORMATION

- A. The components of this product are listed on the EPA / TSCA Inventory of Chemical Substances.
- B. **SARA Hazard Category:** This product has been reviewed according to the EPA "Hazard Categories" per Section 311 / 312 of SARA Title III, and is considered to meet the following categories:
 - 1. An immediate health hazard
 - 2. A delayed health hazard
 - 3. A fire hazard

C. SARA 313 Information: This product contains the following substances subject to the reporting requirements of SARA Title III, Section 313, and 40 CFR Part 372:

Name	CAS NO.	Concentration
Trinitrobenzene	93-63-6	1 - 7%
Cumene	98-82-8	0 - 2%
Xylene	1330-20-7	0 - 1.5%
Glycol Ethers	2567-30-9	7 - 12%

The information contained herein is based on the data available to us and is believed to be correct. However, we make no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. We assume no responsibility for injury from the use of the product described herein.

High VOC Blanket Wash Used at Presslink

LITHO-CHEM, INC.

9441 SANTA FE SPRINGS ROAD, SANTA FE SPRINGS, CA 90670
 TEL: 562.946.5537 FAX: 562.946.2333

LC-1700




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MATERIAL SAFETY DATA SHEET

DATE PREPARED: August 2003 FOR EMERGENCY: 800-424-9300

SECTION I - IDENTIFICATION	
PRODUCT	PIESS WASH
CODE	LC 1700
CHEMICAL FAMILY	Proprietary blend of aliphatic hydrocarbon solvents with ketone
DOT CLASSIFICATION	Paint related material, 3, UN1263, II

SECTION II - HAZARDOUS INGREDIENTS			
	%	TLV	CAS NO.
2-propanone	1-10	750	67-64-1
Aliphatic hydrocarbon	>50	300	84742-89-6

HEALTH	FIRE	REACTIVITY	PERSONAL	HAZARD RATING
 1	 3	 0	B	LEAST = 0 SLIGHT = 1 MODERATE = 2 HIGH = 3 EXTREME = 4
PROTECTION				

SECTION III - PHYSICAL PROPERTIES	
BOILING POINT	131 °F (maximum boiling component)
PARTIAL PRESSURE (mm Hg @ 20 °C)	69.1 (32.3 calculated as per AQMD Rule 1171)
DENSITY (Lbs/Gal)	6.0
SPECIFIC GRAVITY	0.72
SOLUBILITY IN WATER	Appreciable
APPEARANCE AND ODOR	Clear, lavender liquid with a mild solvent odor
VOLATILE ORGANIC COMPOUNDS (VOC)	5.5 lb/gal (863 g/ml) EPA Method 24

SECTION IV - FIRE AND EXPLOSION HAZARDS	
FLASH POINT (TCC)	0°F
EXPLOSIVE LIMITS IN AIR (% BY VOLUME)	Li=1.2% UL=12.8%
EXTINGUISHING MEDIA	Alcohol resistant foam, carbon dioxide, dry chemical
SPECIAL FIRE FIGHTING PROCEDURES	Use self-contained breathing apparatus and protective clothing
UNUSUAL FIRE AND EXPLOSION HAZARD	Material is highly volatile. Vapors may travel at ground level and be ignited by pilot lights, sparks, heaters, electrical motors, etc

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL Not established

THRESHOLD VALUE Not established

EFFECTS OF OVEREXPOSURE

EYES: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness and swelling.

SKIN: Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying, cracking and skin burns. Pre-existing skin disorders may be aggravated by exposure to this material. Absorption is possible but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

EYES: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness and swelling.

SKIN: Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying, cracking and skin burns. Pre-existing skin disorders may be aggravated by exposure to this material. Absorption is possible but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

BREATHING: Exposure to vapors or mist is possible. Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects; breathing large amounts may be harmful. Symptoms are more likely to be seen at air concentrations exceeding the recommended exposure limits. Symptoms of exposure may include:

- Irritation of nose, throat, respiratory tract
- Pre-existing lung disorders, e.g. asthma-like conditions, may be aggravated by exposure to this material resulting in cough, central nervous system (CNS) depression (dizziness, weakness, drowsiness, fatigue, nausea, headache, unconsciousness) and other CNS effects (coma).

SWALLOWING: Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. Symptoms may include: throat irritation, gastrointestinal irritation (nausea, vomiting, diarrhea), central nervous system depression (dizziness, weakness, fatigue, nausea, headache, unconsciousness), high blood sugar, coma. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

FIRST AIDE: If on skin: Remove contaminated clothing, wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before re-use.

If in eyes: If symptoms develop, move individual away from exposure and into fresh air. Flush eyes with water for at least 15 minutes while holding eyelids apart. If symptoms persist, seek medical attention.

If swallowed: **DO NOT INDUCE VOMITING.** This material is an aspiration hazard. If individual is drowsy or unconscious, place on left side with head down. Seek medical attention. If possible, do not leave individual unattended.

If breathed: If symptoms develop, immediately move individual away from exposure and into fresh air. Seek medical attention. Keep individual warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

*****NOTE TO PHYSICIAN***** This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.

PRIMARY ROUTES OF ENTRY: Inhalation, skin absorption, skin contact, eye contact.

EFFECTS OF CHRONIC EXPOSURE: This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies; harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals and may aggravate pre-existing disorders of these organs in humans: mild, reversible liver effects and mild, reversible kidney effects.

SECTION VI - REACTIVITY DATA

STABILITY Stable under normal conditions of storage and handling

INCOMPATIBLE MATERIALS Avoid contact with strong oxidizing agents and strong acids

HAZARDOUS POLYMERIZATION Cannot occur

SECTION VII - SPILL OR LEAK PROCEDURE**STEPS TO BE TAKEN IN CASE OF RELEASE OR SPILL**

- Small spill:** Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood
- Large spill:** Eliminate all ignition sources (flares, flames, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent spill from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to approved containers for disposal.

WASTE DISPOSAL METHOD

- Small spill:** Dispose of in accordance with all local, state and federal regulations
- Large spill:** Dispose of in accordance with all local, state and federal regulations

SECTION VIII - PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY PROTECTION If workplace exposure limit(s) of product (or a component) is exceeded (see Section II), a NIOSH/MSHA air supplied respirator is advised. In absence of proper environmental control, OSHA regulation also permits other NIOSH/MSHA respirators (negative pressure type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

VENTILATION Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure levels below TLV's (see Section II) or to below level of overexposure (from known, suspected or apparent adverse effects).

PROTECTIVE GLOVES Wear resistant gloves (consult safety equipment supplier).

EYE PROTECTION Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also permit other types of safety glasses (consult safety equipment supplier).

OTHER PROTECTIVE EQUIPMENT To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

SECTION IX - SPECIAL PRECAUTIONS OR OTHER COMMENTS

Containers of this material may be hazardous when emptied since emptied containers retain product residues (vapor, liquid and/or solids). All hazard precautions given in this sheet must be observed.

WARNING!!! Sudden release of hot organic vapors or mists from processor equipment operating at elevated temperatures and pressures, or sudden ingress of air into vacuum equipment may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product at elevated process temperatures should be thoroughly evaluated to establish and maintain safe operating conditions.

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE AND SUITABLE TO THEIR CIRCUMSTANCES.

High VOC Roller Wash Step 1 Cleaner Used at Presslink

LITHO-CHEM, INC.

9441 SANTA FE SPRINGS ROAD, SANTA FE SPRINGS, CA 90670
 TEL: 562.946.5537 FAX: 562.946.2333

AQ 1301

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MATERIAL SAFETY DATA SHEET




DATE PREPARED: OCTOBER 2002 FOR EMERGENCY: 562 946 5537

SECTION I - IDENTIFICATION

PRODUCT ROLLER WASH NO. 1
CODE AQ 1301
CHEMICAL FAMILY Aqueous emulsion of aliphatic and aromatic solvents with glycol ether and non-hazardous proprietary ingredients
DOT CLASSIFICATION Combustible liquid, n.o.s., (naphtha), NA1993, III

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV	CAS NO.
Aliphatic Hydrocarbon	30-60	275	8008-20-6
Aromatic Hydrocarbon	10-30	100	64742-95-6
Glycol ether	1-10	20	111-76-2

 HEALTH	 FIRE	 REACTIVITY	PERSONAL	HAZARD RATING LEAST = 0 SLIGHT = 1 MODERATE = 2 HIGH = 3 EXTREME = 4
2	2	0	B PROTECTION	

SECTION III - PHYSICAL PROPERTIES

BOILING POINT 259°F
PARTIAL PRESSURE (mmHg@20°C) 9.5 (1.7 Calculated as per SCAQMD rule 1171)
DENSITY (Lbs/Gal) 7.3
SPECIFIC GRAVITY 0.84
SOLUBILITY IN WATER Appreciable
APPEARANCE AND ODOR Translucent amber liquid with a mild solvent odor
VOLATILE ORGANIC COMPOUNDS (VOC) 4.7 lb/gal (564 g/ml)

SECTION IV - FIRE AND EXPLOSION HAZARDS

FLASH POINT (TCC) 120 °F
EXPLOSIVE LIMITS IN AIR (% BY VOLUME) LL=0.7% UL=10.6%
EXTINGUISHING MEDIA Alcohol foam, carbon dioxide, dry chemical
SPECIAL FIRE FIGHTING PROCEDURES Use self-contained breathing apparatus and protective clothing
UNUSUAL FIRE AND EXPLOSION HAZARD Containers exposed to intensive heat should be cooled with water spray.

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL Not Established
 THRESHOLD VALUE Not Established

EFFECTS OF OVEREXPOSURE:

EYES: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness and swelling.

SKIN Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying, cracking and skin burns. Pre-existing skin disorders may be aggravated by exposure to this material. Absorption is possible but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

BREATHING: Exposure to vapors or mist is possible. Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects; breathing large amounts may be harmful. Symptoms are more typically seen at air concentrations exceeding the recommended exposure limits. Symptoms of exposure may include:

-Irritation of nose, throat, respiratory tract

-Pre-existing lung disorders, e.g. asthma-like conditions, may be aggravated by exposure to this material resulting in cough, central nervous system (CNS) depression (dizziness, weakness, drowsiness, fatigue, nausea, headache, unconsciousness) and other CNS effects (coma).

SWALLOWING: Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. Symptoms may include throat irritation, gastrointestinal irritation (nausea, vomiting, diarrhea), central nervous system depression (dizziness, weakness, fatigue, nausea, headache, unconsciousness), high blood sugar, coma. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

FIRST AID:

- if on skin:** Remove contaminated clothing, wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before re-use.
- if in eyes:** If symptoms develop, move individual away from exposure and into fresh air. Flush eyes with water for at least 15 minutes while holding eyelids apart. If symptoms persist, seek medical attention.
- if swallowed:** DO NOT INDUCE VOMITING. This material is an aspiration hazard. If individual is drowsy or unconscious, place on left side with head down. Seek medical attention. If possible, do not leave individual unattended.
- if breathed:** If symptoms develop, immediately move individual away from exposure and into fresh air. Seek medical attention. Keep individual warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

*****NOTE TO PHYSICIAN***** This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.

PRIMARY ROUTES OF ENTRY: Inhalation, skin absorption, skin contact, eye contact.

EFFECTS OF CHRONIC EXPOSURE: This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies; harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals and may aggravate pre-existing disorders if these organs in humans: mild, reversible liver effects and mild, reversible kidney effects.

SECTION VI - REACTIVITY DATA

STABILITY Stable under normal conditions of storage and handling
INCOMPATIBLE MATERIALS Avoid contact with strong oxidizing agents and strong acids
HAZARDOUS POLYMERIZATION Cannot occur

SECTION VII - SPILL OR LEAK PROCEDURE**STEPS TO BE TAKEN IN CASE OF RELEASE OR SPILL**

- Small spill:** Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood
- Large spill:** Eliminate all ignition sources (flares, flames, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent spill from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to approved containers for disposal.

WASTE DISPOSAL METHOD

- Small spill:** Dispose of in accordance with all local, state and federal regulations
- Large spill:** Dispose of in accordance with all local, state and federal regulations

SECTION VIII - PROTECTIVE EQUIPMENT TO BE USED**RESPIRATORY PROTECTION**

If workplace exposure limit(s) of product (or a component) is exceeded (see Section II), a NIOSH/MSHA air supplied respirator is advised. In absence of proper environmental control, OSHA regulation also permits other NIOSH/MSHA respirators (negative pressure type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

VENTILATION

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure levels below TLV's (see Section II) or to below level of overexposure (from known, suspected or apparent adverse effects).

PROTECTIVE GLOVES

Wear resistant gloves (consult safety equipment supplier).

EYE PROTECTION

Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also permit other types of safety glasses (consult safety equipment supplier).

OTHER PROTECTIVE EQUIPMENT

To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

SECTION IX - SPECIAL PRECAUTIONS OR OTHER COMMENTS

Containers of this material may be hazardous when emptied since emptied containers retain product residues (vapor, liquid and/or solids). All hazard precautions given in this sheet must be observed.

WARNING!!! Sudden release of hot organic vapors or mists from processor equipment operating at elevated temperatures and pressures, or sudden ingress of air into vacuum equipment may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product at elevated process temperatures should be thoroughly evaluated to establish and maintain safe operating conditions.

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE AND SUITABLE TO THEIR CIRCUMSTANCES.

High VOC Roller Wash Step 2 Cleaner Used at Presslink

LITHO-CHEM, INC.

9441 SANTA FE SPRINGS ROAD, SANTA FE SPRINGS, CA 90670
 TEL: 562 546 5537 FAX: 562 548 2333

AQ 1302

Page 1 of 3

MATERIAL SAFETY DATA SHEET



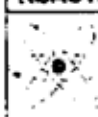
DATE PREPARED: OCTOBER 1998 FOR EMERGENCY: 562 848 5537

SECTION I - IDENTIFICATION

PRODUCT ROLLER WASH No. 2
CODE AQ 1302
CHEMICAL FAMILY Blend of aromatic and aliphatic hydrocarbon solvents
DOT CLASSIFICATION Combustible liquid n.e.s. (naphtha), NA1993, III

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV	CAS NO.
Aliphatic hydrocarbon	70 - 80	400	8052-41-3
Aromatic hydrocarbon	15 - 25	100	64742-95-6
Glycol ether	7 - 12	50	111-76-2

HEALTH	FIRE	REACTIVITY	PERSONAL PROTECTION	HAZARD RATING
 2	 2	 0	B	LEAST = 0 SLIGHT = 1 MODERATE = 2 HIGH = 3 EXTREME = 4

SECTION III - PHYSICAL PROPERTIES

BOILING POINT 310°F
PARTIAL PRESSURE (mmHg@20°C) 2.9
DENSITY (Lbs/Gal) 6.6
SPECIFIC GRAVITY 0.792
SOLUBILITY IN WATER Dispersible
APPEARANCE AND ODOR Clear, yellow, liquid, mild odor
VOLATILE ORGANIC COMPOUNDS (VOC) 6.6 lb/gal (792 g/ml)

SECTION IV - FIRE AND EXPLOSION HAZARDS

FLASH POINT (TCC) 113°F
EXPLOSIVE LIMITS IN AIR (% BY VOLUME) LL=1.0% UL=6.2%
EXTINGUISHING MEDIA Water, foam, carbon dioxide, dry chemical
SPECIAL FIRE FIGHTING PROCEDURES Use self-contained breathing apparatus and protective clothing
UNUSUAL FIRE AND EXPLOSION HAZARD Material is highly volatile. Vapors may travel at ground level and be ignited by pilot lights, sparks, heaters, electrical motors, etc.

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL 750 ppm

THRESHOLD VALUE 750 ppm

EFFECTS OF OVEREXPOSURE

EYES: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness and swelling.

SKIN: Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying, cracking and skin burns. Pre-existing skin disorders may be aggravated by exposure to this material. Absorption is possible but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

BREATHING: Exposure to vapors or mist is possible. Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects; breathing large amounts may be harmful. Symptoms are more typically seen at air concentrations exceeding the recommended exposure limits. Symptoms of exposure may include:

- Irritation of nose, throat, respiratory tract
- Pre-existing lung disorders, e.g. asthma-like conditions, may be aggravated by exposure to this material resulting in cough, central nervous system (CNS) depression (dizziness, weakness, drowsiness, fatigue, nausea, headache, unconsciousness) and other CNS effects (coma).

SWALLOWING: Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. Symptoms may include: throat irritation, gastrointestinal irritation (nausea, vomiting, diarrhea), central nervous system depression (dizziness, weakness, fatigue, nausea, headache, unconsciousness), high blood sugar, coma. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

FIRST AID:

- If on skin: Remove contaminated clothing, wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before re-use.
- If in eyes: If symptoms develop, move individual away from exposure and into fresh air. Flush eyes with water for at least 15 minutes while holding eyelids apart. If symptoms persist, seek medical attention.
- If swallowed: **DO NOT INDUCE VOMITING.** This material is an aspiration hazard. If individual is drowsy or unconscious, place on left side with head down. Seek medical attention. If possible, do not leave individual unattended.
- If breathed: If symptoms develop, immediately move individual away from exposure and into fresh air. Seek medical attention. Keep individual warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

*****NOTE TO PHYSICIAN***** This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.

PRIMARY ROUTES OF ENTRY: Inhalation, skin absorption, skin contact, eye contact.

EFFECTS OF CHRONIC EXPOSURE: This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies; harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals and may aggravate pre-existing disorders of these organs in humans: mild, reversible liver effects and mild, reversible kidney effects.

SECTION VI - REACTIVITY DATA**STABILITY**

Stable under normal conditions of storage and handling

INCOMPATIBLE MATERIALS

Avoid contact with strong oxidizing agents and strong acids

HAZARDOUS POLYMERIZATION

Cannot occur

SECTION VII - SPILL OR LEAK PROCEDURE**STEPS TO BE TAKEN IN CASE OF RELEASE OR SPILL**

- Small spill: Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood
- Large spill: Eliminate all ignition sources (flares, flames, electrical sparks) Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent spill from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to approved containers for disposal.

WASTE DISPOSAL METHOD

- Small spill: Dispose of in accordance with all local, state and federal regulations
- Large spill: Dispose of in accordance with all local, state and federal regulations

SECTION VIII - PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY PROTECTION If workplace exposure limit(s) of product (or a component) is exceeded (see Section II), a NIOSH/MSHA air supplied respirator is advised. In absence of proper environmental control, OSHA regulation also permits other NIOSH/MSHA respirators (negative pressure type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

VENTILATION Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure levels below TLV's (see Section II) or to below level of overexposure (from known, suspected or apparent adverse effects).

PROTECTIVE GLOVES Wear resistant gloves (consult safety equipment supplier).

EYE PROTECTION Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also permit other types of safety glasses (consult safety equipment supplier).

OTHER PROTECTIVE EQUIPMENT To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

SECTION IX - SPECIAL PRECAUTIONS OR OTHER COMMENTS

Containers of this material may be hazardous when emptied since emptied containers retain product residues (vapor, liquid and/or solids). All hazard precautions given in this sheet must be observed.

WARNING!!! Sudden release of hot organic vapors or mists from processor equipment operating at elevated temperatures and pressures, or sudden ingress of air into vacuum equipment may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product at elevated process temperatures should be thoroughly evaluated to establish and maintain safe operating conditions.

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High VOC Roller Cleaner Used at R.R. Donnelley & Sons



MATERIAL SAFETY DATA SHEET

The Anchor MSDS information provided on this site is updated on a monthly basis and con-
OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the American National Standard
(ANSI) Standard for Material Safety Data Sheets (ANSI Z399.1).

Finished Goods Catalog

7755 - ENVIRONMENTAL AUTO LOCK

Manufacturer Name

ANCHOR LITERWORK, A SUBSIDIARY OF FUJII HUNT

SECTION 1 - COMPANY IDENTIFICATION

Catalog / Sub-assembly Number: 7755
ANCHOR LITERWORK, A SUBSIDIARY OF FUJII HUNT
50 Industrial Loop North
George Park, FL 32073

TRANSPORTATION EMERGENCIES (24HR)
Inside US/Canada 800-424-9200
Outside US/Canada 781-527-1887
(except collect calls)
MEDICAL EMERGENCIES (24HR)
Frogar 877-975-7187
EIN-EMERGENCY
EMS Info 904-264-3500
General Info 800-354-2300

FOR INDUSTRIAL USE ONLY.....USE ONLY AS DIRECTED.....DO NOT TAKE INTERNALLY!

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Table with 5 columns: Ingredients, CAS Number, Wt.%, OSHA PEL (mg/m3), and ACGIH (mg/m3). Rows include Aliphatic Hydrocarbon, Aromatic Hydrocarbons, Fatty Acid Ester, and Aliphatic Hydrocarbon.

NE-Not Established STEL-Short Term Exposure Limit Ceiling Limits

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance: light, yellow liquid
Odor: Mild odor

Avoid contact with eyes, skin or clothing. Avoid breathing mist or vapor. Do
not swallow. Wear chemical safety goggles & chemical resistant gloves. Wash
thoroughly after handling. Keep container closed when not in use. Use only

with adequate ventilation. May produce hazardous gases under fire conditions. During emergencies, wear equipment to protect eyes, skin and respiratory tract. Dike or absorb spills to keep material and run-off from entering sewer or waterways. Use water spray to cool containers and disperse vapors. Consult MSDS for additional information.

EMHS: Health: 2 Flammability: 2 Reactivity: 0 Protection: E
NFPA: Health: 2 Flammability: 2 Reactivity: 0 Spec. Haz.: COMB

Hazard Rating: 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe
A - Gloves B - Gloves & Goggles C - Gloves, Goggles & Apron
D - Face Shield, Gloves, Goggles & Apron

UN NO: NA1991

DOT GUIDE: HWS Guide 128

Potential Health Effects:

Skin: Contact causes irritation.
Eyes: Causes irritation.
Inhalation: Irritant to respiratory tract and mucous membranes.
Ingestion: Ingestion of product may cause nausea and vomiting.
Conditions aggravated by exposure:
None expected except those associated with acute effects.

M

SECTION 4 - FIRST AID MEASURES

Eye Contact: Immediately flush with COLD water for 15 minutes. Call a physician.
Skin Contact: In case of skin contact; wash with soap and water for 15 minutes. Call a physician.
Ingestion: In case of ingestion; do not drink water. Do not induce vomiting. Call a physician.
Inhalation: Immediately remove victim to fresh air. Call a physician for further recommendations.

SECTION 5 - FIRE FIGHTING MEASURES

Flammable Properties:
Flash Point: 165 Deg F (74C)
Autoignition Temperature: N/A deg F (CC)
Explosion Limits: Lower: N/A vol.% Not Tested
Upper: N/A vol.%
OSHA Class IIIA Combustible Liquid

Extinguishing Media:

Choose extinguishing media suitable for the surrounding materials, such as water spray, dry chemical, alcohol foam or carbon dioxide.

Unsuitable Extinguishing Media:

No restrictions on media based on knowledge of this material.

Fire Fighting Instructions:

Water spray should be used to cool fire exposed containers and to disperse un-ignited vapors. Use NIOSH/MSHA approved positive pressure self-contained breathing apparatus when material has ignited or becomes involved in a fire. Try to remove material containers from fire area if can be accomplished without risk to personnel.

Evacuate area and fight fire from a safe distance. Call your local fire department. Wear positive pressure, breathing apparatus and protect eyes and skin. Use water to cool fire-exposed containers, to protect personnel and to disperse vapors and spills. Fire media run-off can damage the environment. Dike and collect media used to fight fire.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Small Spills:

For small incidental spills and leaks wear chemical safety goggles, and neoprene gloves and apron or coveralls. Isolate area of spill by diking. Stop source of leak. Add dry absorbent. Clean up and place in an approved D.O.T. container and seal. Wash all contaminated clothing before reuse, and discard contaminated leather shoes.

Large Spills:

For larger spills requiring emergency response, neoprene boots and respiratory protection may also be required. Follow OSHA regulations and NIOSH recommendations for respirator use (29 CFR 1910.134 and NIOSH Pub. 87-103) and emergency response (see 29 CFR 1910.120). Isolate area of spill by diking. Stop source of leak. Add dry absorbent. Clean up and place in an approved D.O.T. container and seal. Wash all contaminated clothing before reuse, and discard contaminated leather shoes. Call the emergency telephone number shown on the front of this sheet.

SECTION 7 - HANDLING / STORAGE

Handling:

Avoid contact with eyes, skin or clothing. Avoid breathing mist or vapor. Do not swallow. Wear chemical safety goggles and neoprene gloves and apron. Wash thoroughly after handling. Keep container closed when not in use. Use only with adequate ventilation.

Storage:

Store in a cool, dry, well-ventilated area away from all sources of ignition. Keep containers closed when not in use.

SECTION 8 - EXPOSURE CONTROL AND PERSONAL PROTECTION

Ventilation:

Good general ventilation should be sufficient for most processing operations. Vent work area to ensure airborne concentrations are below the current occupational exposure limits. Ten (10) or more room air changes per hour containing a minimum of 15% fresh air will meet these requirements. Consult ASHRAE 62-1989 for further requirements.

Personal Protective Equipment

Respiratory Protection: If used under normal operating conditions and with adequate ventilation, respiratory protection is not required. However, refer to OSHA 29 CFR 1910.13

4.

Skin Protection: Chemical resistant gloves
Eye Protection: Chemical safety goggles

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light, yellow liquid

Odor: Mild Odor

Change in Physical State:

Boiling Point: 350-390 Deg F
Melting Point: N/A deg F
Specific Gravity: 0.85 Water=1
Vapor Pressure: 0.2 mmHg @ 20C
Viscosity: N/A
Solubility in Water: Emulsifies
pH Value: N/A
VOC (lbs/gal): 2.26 (USEPA Method 24)

SECTION 10 - STABILITY AND REACTIVITY

Hazardous Polymerization:

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Hazardous polymerization WILL NOT occur if product is used and stored as directed. Product is stable if used and stored as directed.

Hazardous Decomposition Products:

Oxides of Nitrogen; Oxides of Carbon

Materials and Conditions to Avoid:

Keep containers and liquids away from all potential sources of ignition.
Keep away from excess heat. Avoid contact with strong oxidizers, strong acids and strong bases.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product Information

LD50 (oral, rat): No Data Available

Acute Overexposure:

Skin, eye, mucous membrane and respiratory tract irritant.

Chronic Overexposure:

Prolonged or repeated skin contact may cause allergic reaction and dermatitis.

Ingredient Information:

Swallowing of Hydrocarbons can cause lung damage. Repeated exposure to Hydrocarbons can cause dermatitis.

SECTION 12 - ECOLOGICAL INFORMATION

Toxicity Data: No Data Available

Chemical Fate Data: No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Hazardous Waste Characteristic:

None

Recommendation:

Dispose of contaminated product, empty containers and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures. Discharge of processing effluent to the sewer may require a permit. DO NOT discharge effluent solutions to septic systems.

SECTION 14 - TRANSPORTATION INFORMATION

Ground Shipping Information:

Proper Shipping Name: Combustible Liquid, N.O.S. (contains Petroleum Naphtha)

Hazard Class: 3

UN/NA Number: NA1595

Packing Group: PGIII

Air (ICAO/IATA) Shipping Information:

Proper Shipping Name: Chemicals, N.O.S., Not D.G.T. regulated.

Hazard Class: None

IM No: None

Packing Group: None

Subsidiary Risk: None

UN/DOT Labels Needed: Combustible

International Maritime Organization (IMO) Additional Shipping Class:

IMDG Code: Not Applicable

Amdt. Code: Amdt. N/A

HTS Code: 273614.90.5000.0

Product is labeled in accordance with US D.O.T. 49 CFR.

Further information:

Please call 1984: 264-1580 for further D.O.T. information.

SECTION 15 - REGULATORY INFORMATION

**Note: The ingredient information listed in this section is provided for reporting requirements as dictated by USEPA, state and local regulation. If ingredients are listed in this section but not in Section 2, then the concentration of this ingredient is below de minimis (less than 0.1%).

U.S. FEDERAL REGULATIONS:

- 313 - SARA Title III Section 313 (40 CFR 372 -- Toxic Release Inventory)
- 355 - SARA Title III Section 302 (40 CFR 355 -- Extremely Hazardous Substances)
- 302 - SARA Title III Section 304 (40 CFR 302 -- Hazardous Substances List)
- CWA - Clean Water Act Priority Pollutants List
- CAA - Clean Air Act 1990 Hazardous Air Contaminants
- HAP - Clean Air Act - HON Rule - HAPs

Ingredients	CAS Number	313	355	302	CWA	CAA	HAP
Aliphatic Hydrocarbon	64742-88-7	N	N	N	N	N	N
Aromatic Hydrocarbons	70695-06-0	N	N	N	N	N	N
Fatty Acid Ester	TREN 06-0836 -331-5005	N	N	N	N	N	N
Aliphatic Hydrocarbon	8042-47-5	N	N	N	N	N	N

TSCA 12(b) Export Notifications

CAS NUMBER	CHEMICAL NAME
131-11-3	DIMETHYL TEREPHTHALATE (DMT)

TOXICITY INFORMATION:

- IRC1 - IARC Group 1 Human Carcinogens List
- IRC2 - IARC Group 2 Human Carcinogens List (limited human data)
- IRC3 - IARC Group 2B Human Carcinogens List (sufficient animal data)
- STP - NTP Known Carcinogens List
- CSEA - OSHA Known Carcinogens List

Ingredients	CAS Number	IRC1	IRC2	IRC3	STP	CSEA
Aliphatic Hydrocarbon	64742-88-7	N	N	N	N	N
Aromatic Hydrocarbons	70695-06-0	N	N	N	N	N
Fatty Acid Ester	TREN 06-0836 -331-5005	N	N	N	N	N
Aliphatic Hydrocarbon	8042-47-5	N	N	N	N	N

STATE REGULATIONS:

- FL - Florida Hazardous Substances List
- MA - Massachusetts Right-To-Know List
- MI - Michigan Critical Materials List
- MN - Minnesota Hazardous Substance List
- NJ - New Jersey Right-To-Know List
- PA - Pennsylvania Right-To-Know List

Ingredients	CAS Number	PA	ND	MI	MA	FL
Aliphatic Hydrocarbon	64742-88-7	N	N	N	N	N
Aromatic Hydrocarbons	70695-06-0	N	N	N	N	N
Fatty Acid Ester	TREN 06-0836 -331-5005	N	N	N	N	N
Aliphatic Hydrocarbon	8042-47-5	N	N	N	N	N

The following information is required by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1985 or Proposition 65. This regulation does not address de minimis levels; therefore, even trace amounts of chemicals included on these lists must be noted with the "Safe Harbor" wording.

WARNING: Known to the State of California to cause cancer:

CAS NUMBER	CHEMICAL NAME
91-22-3	HEPHTHALENE

WARNING: Known to the State of California to cause developmental toxicity:

None Listed

WARNING: Known to the State of California to cause female reproductive effects:

None listed

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WARNING: Known to the State of California to cause male reproductive effects.
****None listed****

The following designation is used only for those facilities that have air permits in nonattainment areas for ozone:
Non-Photochemically Reactive

SECTION 16 - OTHER INFORMATION

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

High VOC Blanket Cleaner Used at R.R. Donnelley & Sons



MATERIAL SAFETY DATA SHEET

MSDS NUMBER 7.591-3 PAGE 1

24 HOUR EMERGENCY ASSISTANCE SHELL: 713-673-9461 CHEMTREC: 800-424-9300		GENERAL MEDICAL ASSISTANCE SHELL: 713-241-4818		
2 2 0	HAZARD RATING		2 2	
*For acute and chronic health effects refer to the discussion in Section III				

SECTION I - PRODUCT IDENTIFICATION	
PRODUCT	SHELL MINERAL SPIRITS 146 HT
CHEMICAL NAME	SOLVENT NAPHTHA (PETROLEUM), MEDIUM ALIPHATIC
CHEMICAL FAMILY	HYDROCARBON SOLVENT
SHELL CODE	83003

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
1	SHELL MINERAL SPIRITS 146 HT*	64742-88-7	100
*A COMPLEX COMBINATION OF PREDOMINANTLY C8-C12 HYDROCARBONS; EXACT COMPOSITION WILL VARY.			

SECTION II-B		ACUTE TOXICITY DATA		
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LD50	
1	NOT AVAILABLE >95 ML/KG (RAT)	>4 ML/KG (RAT)	>3670 PPM/8H (RAT)	



A. G. LAYNE, INC.
 4578 BRAZIL STREET
 LOS ANGELES, CA 90039
 213/243-2345 * FAX # 818/242-7804

SIGNS AND SYMPTOMS
IRRITATION AS NOTED ABOVE. EARLY TO MODERATE CNS (CENTRAL NERVOUS SYSTEM) DEPRESSION MAY BE ACCOMPANIED BY LETHARGY, HEADACHE, DIZZINESS AND NAUSEA; IN EXTREME CASES, UNCONSCIOUSNESS 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
EXISTING EYE, SKIN, AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

SECTION IV OCCUPATIONAL EXPOSURE LIMITS						
ID.	PEL/TWA	OSHA	PEL/CEILING	TLV/TWA	ACGIH	TLV/STEL
	100 PPM			100 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.

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 CLIPPED ENDOTRACHEAL TUBE SHOULD BE CONSIDERED.

SECTION VI SUPPLEMENTAL HEALTH INFORMATION

MALE RATS EXPOSED FOR 90 DAYS BY INHALATION TO VAPORS OF SIMILAR SOLVENTS 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.

SECTION VII PHYSICAL DATA

BOILING POINT: 220-232

SPECIFIC GRAVITY: 0.78

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

PRODUCT NAME: SHELL MINERAL SPIRITS 120 MT

WGS 7,881-8
PAGE 3

MELTING POINT: NOT AVAILABLE
(DEG F)

SOLUBILITY:
(IN WATER)

NEGLECTIBLE

VAPOR DENSITY: 8.8
(AIR=1)

EVAPORATION RATE (N-BUTYL ACETATE = 1): 0.07

APPEARANCE AND ODOR:
LIGHT COLORED LIQUID. HYDROCARBON ODOR.

SECTION VIII FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD:
100 DEG F (TEC)

FLAMMABLE LIMITS % VOLUME IN AIR
LOWER: 1 UPPER: 7

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 SURFACE OF WATER.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS
CAUTION. COMBUSTIBLE. DO NOT ENTER CONTAINED 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.

OSHA HAS ESTABLISHED TRANSITIONAL OCCUPATIONAL EXPOSURE LIMITS FOR THIS PRODUCT AND/OR COMPONENTS OF THIS PRODUCT. REFER TO 29 CFR 1910.1000 FOR THESE TRANSITIONAL LIMITS AND REQUIREMENTS FOR MEETING THESE LIMITS.

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. TEST DATA FROM PUBLISHED LITERATURE AND/OR GLOVE AND CLOTHING MANUFACTURERS INDICATE THE-

ADDITIONAL PROTECTIVE MEASURES
BEST PROTECTION IS PROVIDED BY NITRILE MATERIAL. USE EXPLOSION-PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS. AIR-DRY CONTAMINATED CLOTHING IN A WELL VENTILATED AREA THEN LAUNDED BEFORE REUSING.

ACT NAME: SHELL MINERAL SPIRITS 148 WT

MSDS 7,681-3
PAGE 4

SECTION XII ENVIRONMENTAL PROTECTION

ON LEAK PROCEDURES
IGN. 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
DIE WITH AN ABSORBENT SUCH AS CLAY, SAND, OR OTHER SUITABLE MATERIAL. PLACE IN NON-LEAKING
DUMPS AND SEAL TIGHTLY FOR PROPER DISPOSAL. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE.
*** SMALL SPILLS *** TAKE UP WITH AN ABSORBENT MATERIAL AND
DISPOSE IN NON-LEAKING CONTAINERS FOR PROPER DISPOSAL.

SECTION XIII SPECIAL PRECAUTIONS

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
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.
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,
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 XIV TRANSPORTATION REQUIREMENTS

HAZARD IDENTIFICATION BY TRANSPORTATION CLASSIFICATION:
FLAMMABLE LIQUID

1. PROPER SHIPPING NAME:
HEAVY MINERAL OIL

2. REQUIREMENTS:
155. GUIDE SHEET 17.

SECTION XV OTHER REGULATORY CONTROLS

THIS PRODUCT IS LISTED ON THE EPA/TSCA INVENTORY OF CHEMICAL SUBSTANCES.
ACCORDANCE WITH 40 CFR TITLE III, SECTION 313, THE MSDS SHOULD ALWAYS BE COPIED AND SENT WITH THE
SHIPMENT.

SECTION XVI STATE REGULATORY INFORMATION

PRODUCT NAME: SHELL MINERAL SPIRITS 140 NT

MSDS 7,831-3
PAGE 1

THIS INFORMATION IS BEING SYSTEMATICALLY ADDED TO OUR MSDS. IT WAS PREVIOUSLY BEEN PROVIDED TO YOU IN VARIOUS WAYS, INCLUDING THE MSDS. THE NEW MSDS FORMAT IS INTENDED TO PROVIDE THE USER WITH THE INFORMATION IN A MORE CONVENIENT MANNER.

SECTION XVI

SPECIAL NOTES

THIS REVISION REFLECTS A PRODUCT NAME CHANGE.

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: JANUARY 31, 1995

BE SAFE

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

G. A. VAN BELSEN

SHELL OIL COMPANY
PRODUCT SAFETY AND COMPLIANCE
P. O. BOX 4330
HOUSTON, TX 77210

High VOC Hand Blanket Wash Used at The Castle Press

M A T E R I A L S A F E T Y D A T A S H E E T

POWERKLENE VC

Page: 1

PRODUCT NAME: POWERKLENE VC
 PRODUCT CODE: A748
 CHEMICAL NAME: BLANKET AND ROLLER WASH

HMS CODES: H P R P
 1*2 0 B

***** SECTION I - MANUFACTURER IDENTIFICATION *****

MANUFACTURER'S NAME: PRINTERS' SERVICE
 ADDRESS : 26 Blanchard Street
 Newark, New Jersey 07105

EMERGENCY PHONE : 1-800-424-9300 DATE REVISED : 06/10/97
 INFORMATION PHONE : 1-973-589-7800 NAME OF PREPARER : ENVIRONMENTAL DEPT.

***** SECTION II - HAZARDOUS INGREDIENTS/MSDS XII INFORMATION *****

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ 20°C	WEIGHT PERCENT
AROMATIC PETRO DISTILLATE (C6-C11) PEL 100 ppm // LD50 4.7g/kg; LC50 3670 ppm/8hr	64742-95-6	2.7mmHg	25 C 40 - 50%
ALIPHATIC PETRO DISTILLATE (C9 - C11) PEL 100ppm; TLV 100ppm // LD50> 26ml/kg; LC50 700ppm/4hr	64742-48-9	2.7	25 C 40 - 50%
DIPROPYLENE GLYCOL METHYL ETHER PEL 100ppm; TLV 100ppm // LD50 7.5g/kg	34590-94-8	0.3mmHg	20 C 1 - 10%
1-METHYL-4-(1-METHYLETHENYL)CYCLOHEXENE LD50 > 5g/kg	5895-27-5	3mmHg	20 C 1 - 10%
CORBITAN MONOLEASE LD50 > 15g/kg	1338-43-8	NO DATA	NO DATA 1 - 10%

CAS# 64742-95-6 contains approximately 5% XYLENE (CAS# 1330-20-7) which has a PEL and TLV of 100 ppm approximately 4% CUMENE (CAS# 96-42-8), which has a PEL and TLV of 50 ppm-skin; and approximately 2% 1,2,4 TRIMETHYLBENZENE (CAS# 95-83-7), which has a PEL and TLV of 25 ppm. XYLENE, CUMENE AND 1,2,4 TRIMETHYLBENZENE are subject to the reporting requirements of section 313 OF SARA TITLE III.

***** SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS *****

BOILING POINT : 316 F SPECIFIC GRAVITY (Gd-1): 0.82
 VAPOR DENSITY : 4.4 (air =1) VAPOR PRESSURE : 2.62 mmHg
 DENSITY : 0.29 (water) Acet. =1 VOC : 6.69 lb/gal METHOD: EPA #24
 HYDROLYZABLE : YES MSD SOLUBILITY : SLIGHT
 VOLATILE : 96% APPEARANCE : YELLOW
 PHYSICAL STATE : LIQUID OXID : MODERATE

***** SECTION IV - FIRE AND EXPLOSION HAZARD DATA *****

FLASH POINT : 114 F METHOD USED: TCC
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 0.5 UPPER: 6.1
 EXTINGUISHING MEDIA: CARBON DIOXIDE, FOAM, OR DRY POWDER (WATER MAY BE INEFFECTIVE)
 SPECIAL FIREFIGHTING PROCEDURES : KEEP CONTAINER COOL. CONTROL COOLING WATER SINCE IT MAY TEND TO SPREAD BURNING MATERIAL.
 UNUSUAL FIRE AND EXPLOSION HAZARDS: IF BOILING POINT OF SOLVENT IS REACHED, THE CONTAINER MAY CAPTURE EXPLOSIVELY AND IF FURTHER, GENERATE A FIREBALL.

***** SECTION V - REACTIVITY DATA *****

STABILITY: YES IF NO CONDITIONS:
 INCOMPATIBILITY (MATERIALS TO AVOID): YES IF YES WHICH OXID: STRONG OXIDIZER
 HAZARDOUS DECOMPOSITION OR BYPRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE ON IGNITION
 HAZARDOUS POLYMERIZATION: NONE

***** SECTION VI - HEALTH HAZARD DATA *****

INDICATIONS OF EXPOSURE:
 INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: HEADACHE, DIZZINESS, NAUSEA. VERY HIGH LEVELS OF VAPORS COULD CAUSE UNCONSCIOUSNESS. SLIGHT IRRITATION OF THE MUCOUS MEMBRANE
 EYE CONTACT AND SYMPTOMS OF EXPOSURE: REDNESS OR BURNING SENSATION.
 SKIN HEALTH RISKS AND SYMPTOMS OF EXPOSURE: REDNESS, ITCHING, IRRITATION ON OVEREXPOSURE.

High VOC Automated Blanket Wash Used at The Castle Press

PRODUCT NAME: AUTOWASH 6000
 PRODUCT CODE: A299
 CHEMICAL NAME: BLANKET AND ROLLER WASH

HMTS CODES: H F R P
 1 2 C 3

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: PRINTERS' SERVICE
 ADDRESS : 26 Blanchard Street
 Newark, New Jersey 07105

EMERGENCY PHONE : 1-800-424-9300
 INFORMATION PHONE : 1-973-589-7800
 LAST REVISION : 8/02/2000
 DATE REVISED : 09/22/00
 PREPARED BY : ENVIRONMENTAL DEPT.

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
ALIPHATIC PETRO DISTILLATE (C5 - C11) PEL 100ppm; TLV 100ppm // LD50: 25ml/kg; LC50 780ppm/4hr	64742-48-9	2.7 mmHg 25 C	70 - 80%
AROMATIC PETRO DISTILLATE (C6-C11) PEL 100 ppm // LD50 4.7g/kg; LC50 3670 ppm/4hr	64742-95-6	2.7mmHg 25 C	20 - 30%
NONYLPHENOLPOLY(ETHYLENEOXY)ETHANOL LD50 2.4g/kg	9016-45-9	NO DATA	NO DATA 1 - 10%

* Indicates chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372. CAS# 64742-95-6 contains approximately 5% XYLENE (CAS# 1330-20-7) an HAP reportable which has a PEL and TLV of 100 ppm; approximately 4% CUMENE (CAS# 98-02-8), an HAP reportable which has a PEL and TLV of 50 ppm-skin; and approximately 2% 1,2,4 TRIMETHYLBENZENE (CAS# 95-63-6), which has a PEL and TLV of 25 ppm. XYLENE, CUMENE AND 1,2,4 TRIMETHYLBENZENE are subject to the reporting requirements of section 313 of SARA TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT : 313 F
 VAPOR DENSITY : 4.56 (air = 1)
 CRYING RATE : 12(n-Butyl Acet.-1)
 PHOTOREACTIVE : YES
 VOLATILES : 98%
 PHYSICAL STATE : LIQUID

SPECIFIC GRAVITY (H2O=1): 0.76
 VAPOR PRESSURE : 2.7 mmHg at 20 C
 VOC : 6.48 lb/gal METHOD: EPA 824
 HD SOLUBILITY : SLIGHT
 APPEARANCE : CLEAR
 COLOR : SOLVENT COLOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT : 105 F
 FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: 0.5 UPPER: 5.0
 EXTINGUISHING MEDIA: CARBON DIOXIDE, FOAM, OR DRY POWDER (WATER MAY BE INEFFECTIVE)
 SPECIAL FIREFIGHTING PROCEDURES : KEEP CONTAINER COOL. CONTROL COOLING WATER SINCE IT MAY TEND TO SPREAD BURNING MATERIAL.
 UNUSUAL FIRE AND EXPLOSION HAZARDS : IF BOILING POINT OF SOLVENT IS REACHED, THE CONTAINER MAY REPTURE EXPLOSIVELY AND IF IGNITED, GENERATE A FIREBALL.

SECTION V - REACTIVITY DATA

STABILITY: YES IF NO CONDITIONS:
 INCOMPATIBILITY (MATERIALS TO AVOID): YES
 IF YES WHICH ONES: STRONG OXIDIZER
 HAZARDOUS DECOMPOSITION OR BYPRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE ON IGNITION
 HAZARDOUS POLYMERIZATION: NONE

SECTION VI - HEALTH HAZARD DATA

INDICATIONS OF EXPOSURE:
 INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: HEADACHE, DIZZINESS, NAUSEA. VERY HIGH LEVELS OF VAPORS COULD CAUSE UNCONSCIOUSNESS.
 *LIGHT IRRITATION OF THE MUCOUS MEMBRANE
 E. CONTACT AND SYMPTOMS OF EXPOSURE: REDNESS OR BURNING SENSATION.
 SKIN HEALTH RISKS AND SYMPTOMS OF EXPOSURE: REDNESS, ITCHING, IRRITATION ON OVEREXPOSURE.

High VOC Roller Wash Step 1 Cleaner Used at The Castle Press

High VOC Roller Wash Step 2 Cleaner Used at The Castle Press

SUPERKLENE 2P

MATERIAL SAFETY DATA SHEET

Page: 1

PRODUCT NAME: SUPERKLENE 2P
PRODUCT CODE: A315
CHEMICAL NAME: NO OFF ROLLER WASH - SECOND STEP

HMIS CODES: H F R 2
1*2 2 2

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: PRINTERS' SERVICE
ADDRESS: 25 Blanchard Street
Newark, New Jersey 07105

EMERGENCY PHONE: 1-800-424-9300
INFORMATION PHONE: 1-973-589-7800
DATE REVISED: 07/23/97
NAME OF PREPARER: ENVIRONMENTAL DEPT.

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

Table with 4 columns: REPORTABLE COMPONENTS, CAS NUMBER, VAPOR PRESSURE (mm Hg @ 25°C), WEIGHT PERCENT. Includes entries for AROMATIC PETRO DISTILLATE (C8-C11) and ALIPHATIC PETRO DISTILLATE (C9-C11).

CAS# 64742-95-6 contains approximately 5% XYLENE (CAS# 1330-20-7) which has a PEL and TLV of 100 ppm; approximately 4% DURENE (CAS# 98-82-6), which has a PEL and TLV of 50 ppm-skin; and approximately 2% 1,2,4-TRIMETHYLBENZENE (CAS# 95-63-7), which has a PEL and TLV of 25 ppm. XYLENE, DURENE AND 1,2,4-TRIMETHYLBENZENE are subject to the reporting requirements of section III of SARA TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 315 F
VAPOR DENSITY: 4.4 (air = 1)
DRYING RATE: 0.25 (rubyl? acet = 1)
PHOTOREACTIVE: YES
VOLATILES: NONE
PHYSICAL STATE: LIQUID
SPECIFIC GRAVITY (20-1): 0.83
VAPOR PRESSURE: 2.7 mmHg
VOC: 6.05 lb/gal
METHOD: EPA #24
H2O SOLUBILITY: NONE
APPEARANCE: GREEN
ODOR: SOLVENT ODOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 105 F
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 0.5 UPPER: 6
EXTINGUISHING MEDIA: CARBON DIOXIDE, FOAM, OR DRY POWDER (WATER MAY BE INEFFECTIVE)
SPECIAL FIREFIGHTING PROCEDURES: KEEP CONTAINER COOL. CONTROL COOLING WATER SINCE IT MAY TEND TO SPREAD BURNING MATERIAL.
UNUSUAL FIRE AND EXPLOSION HAZARDS: IF BOILING POINT OF SOLVENT IS REACHED, THE CONTAINER MAY BURST AND IF IGNITED, GENERATE A FIREBALL.

SECTION V - REACTIVITY DATA

STABILITY: YES IF NO CONDITIONS:
INCOMPATIBILITY (MATERIALS TO AVOID): YES IF YES WHICH ONE(S): STRONG OXIDIZER
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE OR HYDROGEN
HAZARDOUS POLYMERIZATION: NONE

SECTION VI - HEALTH HAZARD DATA

INDICATIONS OF EXPOSURE:
INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: HEADACHE, DIZZINESS, NAUSEA. VERY HIGH LEVELS OF VAPORS COULD CAUSE UNCONSCIOUSNESS. SLIGHT IRRITATION OF THE MUCOUS MEMBRANE.
EYE CONTACT AND SYMPTOMS OF EXPOSURE: REDNESS OR BURNING SENSATION.
SKIN HEALTH RISKS AND SYMPTOMS OF EXPOSURE: REDNESS, ITCHING, IRRITATION ON OVEREXPOSURE.
INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: SEVERE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.
EMERGENCY AND FIRST AID PROCEDURES:
IF IN EYES: FLUSH WITH WATER FOR 15 MIN. LIFT UPPER AND LOWER EYE LIDS. SEE A DOCTOR.
IF ON SKIN: WASH WITH SOAP AND WATER.
IF INHALED: REMOVE TO FRESH AIR. IF UNCONSCIOUS, USE ARTIFICIAL RESPIRATION.
IF INGESTED: DO NOT INDUCE VOMITING. SEE DOCTOR IMMEDIATELY TO PUMP STOMACH.

High VOC Cleaner Used at Print 2000

Step #2 roller wash

Material Safety Data Sheet

SECTION I - PRODUCT IDENTIFICATION

PRODUCT: STEP #2 ROLLER WASH
SUPPLIER: A. G. Layne, Inc.
4578 Brazil Street
Los Angeles, California 90039
(323) 245-2345
(818) 242-8643

NFPA Ratings:
Health: 1
Fire: 2
React: 0
Special: ---
0=LEAST to 4=EXTREME

HIMIS PERSONAL PROT: J

24 HOUR EMERGENCY CONTACT: Chemtrec (800) 424-9300

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS (CAS Number) EXPOSURE LIMITS
Mineral Spirits (64742-88-7) 100 ppm recommended
Light Aromatic Solvent Naphtha (64742-95-6) ND Contains:
Xylene (1330-20-7) OSHA TWA 100 ppm, STEL 150 ppm, ACOHI TWA 100 ppm, STEL 150 ppm
1,2,4-trimethylbenzenes (95-63-6) OSHA TWA 25 ppm

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 315°-400° F
SPECIFIC GRAVITY (1120=1): 0.8
VAPOR DENSITY (Air=1): >1
SOLUBILITY IN WATER: Insoluble
APPEARANCE AND ODOR: light colored liquid, aromatic solvent odor
MELTING POINT: NA
VAPOR PRESSURE: 1.5 mmHg @ 20 deg. C (68 deg. F)
EVAPORATION RATE (BuAc=1): <1
pH: NA
VOC: 8.6 lb/gal, 70.187 gr/l

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method): 108° F
FLAMMABLE LIMITS: Lower [ND] Upper [ND]
EXTINGUISHING MEDIA: Dry powder, carbon dioxide (CO2), water fog or spray.
SPECIAL FIRE FIGHTING PROCEDURES: Approach fire from upwind side. Avoid breathing smoke, fumes, mist, or vapors on the downwind side. Firefighters wear protective clothing, and self contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Firefighters wear protective clothing, and self contained breathing apparatus.

SECTION V - REACTIVITY INFORMATION

STABILITY: Product is Stable
INCOMPATIBILITY:
MATERIALS TO AVOID: Oxidizing materials.
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: From combustion: smoke, carbon monoxide, carbon dioxide.
HAZARDOUS POLYMERIZATION: Will not occur.

STEP #2 ROLLER WASH**SECTION VI - HEALTH HAZARD DATA****ROUTES OF ENTRY**

INHALATION? possible - irritant/narcotic
 SKIN ABSORPTION? yes - unlikely

SKIN/EYES? yes - irritant
 INGESTION? possible - irritant

HEALTH HAZARDS

ACUTE: Inhalation of vapors may be narcotic or anesthetic. Ingestion of liquid will cause gastrointestinal distress, irritation, and possibly nausea. Liquid or vapors may be irritating to skin and eyes.

CHRONIC: None Established

CARCINOGENICITY: LISTED IN NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

SIGNS AND SYMPTOMS OF EXPOSURE: Signs of inhalation overexposure, in order: Irritation of respiratory tract, nervous system depression, headaches, dizziness, staggering gait, confusion, unconsciousness, coma.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Pre-existing skin disorders.

FIRST AID PROCEDURES

EYE CONTACT: Flush eyes with water 15 minutes. Get medical attention if symptoms develop and persist.

SKIN CONTACT: Flush with water or soap and water for 15 minutes or until all traces have been removed. Seek medical attention if symptoms develop and persist.

INGESTION: Do not induce vomiting. Rinse mouth out with water. Get immediate medical attention.

INHALATION: Remove victim to fresh air and, if needed, immediately begin artificial respiration. Give oxygen if breathing is labored. Get emergency medical help. Contact a physician immediately.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

SPILL OR LEAK PROCEDURES: Emergency response coordinator must have mandated training. Eliminate all ignition sources.

SMALL SPILLS: Pick up with absorbent materials and place in non-leaking containers; seal tightly for proper disposal or reuse. **LARGE SPILLS:** Evacuate the hazard area of unprotected personnel. Wear appropriate respirator and protective clothing. Shut off source of leak if safe to do so. Dike and contain. Remove with vacuum trucks or pumps to storage/salvage vessels.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Store in a cool place away from ignition sources. Store away from oxidizers or materials bearing a yellow "D.O.T." label.

OTHER PRECAUTIONS: Clean up leaks/spills immediately to prevent soil or water contamination.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION: If TLV is met or exceeded NIOSH Approved respirator.

VENTILATION: LOCAL EXHAUST - Recommended, SPECIAL - Not necessary,
 MECHANICAL - Recommended, OTHER - Not necessary.

PROTECTIVE GLOVES: Chemical resistant gloves.

EYE PROTECTION: Chemical goggles or full face shield.

OTHER PROTECTIVE EQUIPMENT: Boots, aprons, drench showers, eye wash as needed for protection against spills and/or splashes.

WORK HYGIENIC PRACTICES: Avoid contact with skin, eyes, and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown in section VI. Launder contaminated clothing before reuse.

FEB-13-2001 14:58

PRIMESOURCE CORP

P.13/13

STEP #2 ROLLER WASH**SECTION IX - TRANSPORTATION INFORMATION**Shipping Name: Combustible Liquid, N.O.S., (Petroleum Distillate), NA 1000, POH
Conditions under 119: Flammable - Non-Flammable Combustible Liquid, Flashpoint at or above 100 deg. F., Guide 120**SECTION X - REGULATORY/ENVIRONMENTAL**EPA HAZARDS: ACUTE - Yes CHRONIC - No FLAMMABILITY - Yes
SUDDEN RELEASE OF PRESSURE - No REACTIVE - No

CERCLA RQ: 33,100 based on Xylene

NOTICE: V.O.C. DECLINE WITH ADDITIONS OF WATER

SARA Title III

Section 313, Toxic Materials:

Chemical Name	CAS #	Percentage
Xylene	(1330-20-7)	0 - 2%
1,2,4-trimethylbenzene	C95-63-6)	10%

CLEAN AIR ACT: Section 111

CLEAN WATER ACT: Section 311

STATE REQUIREMENTS:

Xylene (CAS# 1330-20-7) and Cumene (CAS# 98-82-8) are regulated by CA, CT, FL, IL, LA, MA, ME, MN, NJ, PA, and RI in various state regulations. Other states may also have special requirements. This product contains less than 1% Cumene.

1,2,4-trimethylbenzene (CAS# 95-63-6) is regulated by CA, MA, MN, NJ, and PA.

Other components of this product may be included in various state regulations.

For details on specific state requirements, contact the appropriate agency in your state.

CALIF. PROP. 65: To the best of our present knowledge, based on information available at the time of this entry, we are not aware of any chemicals present in this product known to the State of California to cause cancer, birth defects, and/or reproductive harm.

TOXIC SUBSTANCES CONTROL ACT (TSCA), 40 CFR 710 Sources of the raw materials used in this mixture assure that all chemical ingredients present are in compliance with Sect. 8(b) Chemical Substance Inventory, or are otherwise in compliance with TSCA.

Footnotes:

NA - Not Applicable ND - Data Not Available CS - Cancer Suspect Agent OX - Oxidizes Cor - Corrosive

CALC - Calculated EST - Estimated STEL - Short Term Exposure Limit

TLV - Threshold Limit Value PEL - Permissible Exposure Limit TWA - Time Weighted Average, 8 hours

HMIS, PPI - Hazardous Material Identification System, Personal Protection Index

The data presented is true and correct to the best of our knowledge and belief, however, neither seller nor preparer makes any warranties, express or implied, concerning the information presented. The user is cautioned to perform his own hazard evaluation and to rely upon his own determinations.

SCIENTIFIC INFORMATION SERVICES

Form essentially the same as OSHA Form 174 dated September 1981:

Preparation date: July 15, 1991

Revised by:

TALEM, Inc.

(817) 335-1186

August 1996: Section II: deleted minor component of Naphthalene
Section III: revised Vapor pressure and VOC
Section X: updated 313 chemicals, added state requirements and the California Proposition 65 Warning

September 1996: Section IX

307 - Section IX - Shipping Name, Guide # - A.G. Layne, Inc.

308 - Section III - Physical/Chemical Characteristics - Vapor Pressure, VOCs data - A.G. Layne, Inc.

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TOTAL P. 13

High VOC Blanket and Roller Cleaner Used at The Dot Printer

KEBFORM 4800



MATERIAL SAFETY DATA SHEET



Page: 1

Revised: February 20, 2000

PRODUCT CODE: 8030008

HAZID CODES: H F H P

1 2 0 X

BLEANCHER WASH

SECTION 1 - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: Day International Chemical Products Div.
 ADDRESS : 905 South Westwood Avenue
 Addison, Illinois 60101

EMERGENCY PHONE: 800-424-9000

INFORMATION PHONE: 800-336-8278

NAME OF PREPARER: DAY Chemical Prod. Div.

DATE PRINTED: 2/20/03

REASON REVISED: Update; Supersedes All Previous Revisions.

SECTION 2 - HAZARD IDENTIFICATION

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE MM HG @ TEMP	WEIGHT PERCENT	
Petroleum Naphtha OSHA PEL: 500ppm TWA, ACGIH TLV: N/E	64742-47-8	2.6	68°F	53
Petroleum Naphtha OSHA PEL: N/E, ACGIH TLV: N/X, Mfg: 50ppm	64742-85-6	2.7	68°F	28
* 1,2,4-Trinitroethyl Benzene	84-83-6			11
Dipropylene Glycol Methyl Ether OSHA PEL: 100ppm, ACGIH TLV: 100ppm, STEL: 150ppm	34580-84-8	0.17	88°F	3
* Xylenes Hazardous Air Pollutant	1330-20-7			1

* indicates toxic chemical(s) subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372. A3 ingredients are listed on the EPA TSCA Inventory.

SECTION 3 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE/POINT: 315°F - 338°F
 VAPOR DENSITY: Heavier than air.
 EVAPORATION RATE: Slower than n-Butyl Acetate.
 V.O.C. (EPA METHOD 24): 8.6 lb/gal
 VAPOR PRESSURE (MM HG @ 20°C): 2.6
 SOLUBILITY IN WATER: Emulsible
 APPEARANCE AND ODOR: Yellow Liquid - Petroleum Odor
 SPECIFIC GRAVITY (20/4): .82

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 107°F
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1.0%
 METRIC USED: TAG CC
 UPPER: 8.9%

EXTINGUISHING MEDIA:
 Foam, Alcohol Foam, CO2, Dry Chemical, Water Fog.

SPECIAL FIREFIGHTING PROCEDURES:

As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved) and full protective gear. Water may not be effective to extinguish fire. Use water spray to cool fire-exposed containers and to protect personnel.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Treat as Petroleum Fire.



SECTION 5 - STABILITY AND REACTIVITY DATA

STABILITY:

Stable

CONDITIONS TO AVOID:

Avoid heat, sparks, flame and other sources of ignition.

INCOMPATIBILITY MATERIALS TO AVOID:

Avoid mixing with strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Burning will produce oxides of carbon and dense smoke.

HAZARDOUS POLYMERIZATION:

Will Not Occur.

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Breathing high concentrations of vapors will cause irritation of the nose and throat. Signs of central nervous system depression such as headache, drowsiness, dizziness and nausea may be experienced with overexposure.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Skin and eye contact may cause moderate to severe irritation.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Single prolonged exposure is not likely to result in the product being absorbed through the skin in harmful amounts.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Ingestion of this product will cause nausea, gastro-intestinal irritation, diarrhea and possible damage to vital organs. Follow first aid procedures.

HEALTH HAZARDS (ACUTE AND CHRONIC):

Repeated or abusive breathing of concentrated vapors may affect pulmonary, cardiovascular, and central nervous systems. Repeated skin contact will dry out and crack skin. Aspiration hazard if swallowed; aspiration of product into the lungs can cause chemical pneumonitis.

CARCINOGENICITY: NTP CARCINOGEN: No

IARC MONOGRAPHS: No

OSHA REGULATED: No

This product contains no known carcinogens.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Skin contact may aggravate pre-existing dermatitis. Inhalation of vapors may aggravate pre-existing asthma like conditions.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: Remove victim to fresh air. Give oxygen if breathing is labored. Apply artificial respiration if not breathing. Seek medical help. **SKIN:** Remove all contaminated clothing and shoes. Wash with soap and water. Do not reuse clothing and shoes until cleaned. **EYES:** Flush eyes with plenty of water while removing any contact lenses. Hold eyelids open and continue flushing for at least 15 minutes. **INGESTION:** DO NOT INDUCE vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Seek medical attention immediately.

**SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE****STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Eliminate all ignition sources. Spills should be diked and must be kept from entering the sewer. Soak up with absorbent or transfer liquid into a closed container for later disposal. Use spark-proof tools and explosion proof equipment.

WASTE DISPOSAL METHOD:

If this product as supplied, becomes a waste it is regulated by RCRA as ignitable Waste, EPA ID #D001. Suitable methods of disposal include redemation and fuel blending. Contact a licensed Hazardous Waste Hauler for more information.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Containers should be grounded and bonded before transferring product. Store in the original closed container away from sunlight, excess heat, sparks, flames and other sources of ignition. Avoid skin or eye contact. Avoid breathing vapors. When transferring or using this product, wear proper personal protective equipment. Store and handle as a Combustible Liquid.

OTHER PRECAUTIONS/DOT INFORMATION:

DOT Proper Shipping Name: Combustible Liquid n.o.s. (Naphthal), Hazard Class: Combustible Liquid, ID No.: NA1993, Packing Group: II, Non-bulk; packagings not regulated as per 49CFR 173.150 (E2). Product is classified as an OSHA Class II Combustible Liquid.

SECTION 8 - RESPIRATORY PROTECTION**RESPIRATORY PROTECTION:**

The use of respiratory protection is advised when concentrations exceed the established exposure limits in SECTION 2. Depending on the airborne concentration, use a respirator with appropriate organic vapor cartridge (NIOSH approved).

VENTILATION:

If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits in SECTION 2, additional general ventilation or local exhaust systems may be required.

PROTECTIVE GLOVES:

Wear solvent resistant gloves made of nitrile or butyl rubber.

EYE PROTECTION:

Wear safety glasses with side shields.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

A personal protective rating of X means you must see your supervisor for guidance. OSHA regulations (29CFR Part 1910, Subpart I) require employers to evaluate Personal Protective Equipment requirements in the workplace.

WORK/HYGIENE PRACTICES:

Wash with soap and water after product contact with skin.

SECTION 9 - DISCLAIMER

The information on this MSDS is believed to be accurate as of the date shown in SECTION 1. Since the use of this product is under the control of DAY Chemical Products Division, it is the user's responsibility to determine what constitutes safe usage for particular product. This form may be reproduced in quantities necessary to meet your requirements.

High VOC Cleaner Used at Lithographix

MATERIAL SAFETY DATA SHEET

09/18/96

Tower Products, Inc., 2703 Freemansburg Ave., Easton, PA 18045
 Information Telephone Number: 1-800-527-8626 or 610-253-6206
 For Chemical Spill Emergency - Call 1-800-424-9300

SECTION 1: PRODUCT INFORMATION

Product Name: 396 U.V. WASH (Premium One-Step Ultraviolet Ink Cleaner)
 D.O.T. Designation: Combustible Liquid, N.O.S. (Contains Naphtha, Solvent,
 Dipropylene Glycol Monomethyl Ether), NA1993, PGIII

SECTION 2: HAZARDOUS COMPONENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENT	CAS No.	%WT.	OSHA* PEL	ACGIH TLV-TWA	OTHER RATINGS	OSHA* STEL
Aromatic Hydrocarbon	64742-95-6	55-65	100ppm	-	-	-
Dipropylene Glycol Monomethyl Ether	34590-94-8	45-55	100ppm	100ppm	-	150ppm

*OSHA data is based on 1993 levels.

SECTION 3: PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: 305-340 degrees F.
 Specific Gravity: (Water =1) 0.91
 Vapor Pressure: (mmHG, calculated) 3.0 at 68 degrees F., 20 degrees C.
 Melting Point: N/A
 Vapor Density: (Air =1, calculated) <5
 Solubility in Water: Negligible
 Appearance & Odor: Light colored liquid, petroleum odor
 Maximum VOC Content: 7.5 lbs. per gallon (900 grams per liter)
 Maximum VOC% : 100% (EPA Method 24)

SECTION 4: FIRE AND EXPLOSION DATA

Flash Point (Tag Closed Cup Method): 115 degrees F.
 Flammable Limits (Calculated): LEL: 0.6% UEL: 14%
 Extinguishing Media: Use dry chemical or carbon dioxide.
 Special Fire-fighting Procedures: Use self-contained breathing apparatus.
 Unusual Fire and Explosion Hazards: Combustible liquid. Upon combustion,
 the product may form carbon monoxide and other organic compounds. Product
 containers may rupture from vapor pressure when exposed to heat from fire.

SECTION 5: REACTIVITY DATA

WARNING: Spontaneous combustion may occur when solvent soaked combustible
 materials (paper, cotton, etc.) are allowed to stand in confined areas.
 Stability: Stable
 Incompatibility: Avoid strong oxidizing agents.
 Hazardous Decomposition or Byproducts: Carbon monoxide and other compounds
 during combustion.
 Hazardous Polymerization: Will not occur.
 Conditions to Avoid: Avoid exposure to high heat sources, electrical and
 welding arcs and open flame. Also avoid strong oxidizing agents.

SECTION 6: HEALTH HAZARD DATA

Route of Entry: Inhalation, Ingestion, Skin
 Health Hazards (Acute): Overexposure may lead to central nervous system
 depression, leading to headaches, nausea and unconsciousness.
 Health Hazards (Chronic): Overexposure in high concentrations may produce
 central nervous system depression.
 Eye Contact: May lead to irritation.
 Skin Contact: May lead to dermatitis.
 Ingestion: May lead to vomiting.

Signs and Symptoms of Exposure: Overexposure may lead to dizziness, headaches, dermatitis and eye irritation.

Medical Conditions Aggravated by Exposure: Health studies have shown that many petroleum hydrocarbons pose potential health risks that vary from person to person, exposure to liquids, vapors, mists or fumes should be minimized.

Emergency and First Aid Procedures:

For Skin Contact: Flush with large volume of water for at least 15 minutes. Get immediate medical attention if necessary.

For Inhalation: Remove to fresh air. Get immediate medical attention.

For Eye Contact: Flush with large volume of water for at least 15 minutes. Get immediate medical attention.

For Ingestion: Get immediate medical attention. Do not induce vomiting.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE/REGULATORY INFORMATION

Steps to be taken in case material is released or spilled:

Minor Spills: Absorb material with ground clay, vermiculite, or similar absorbent material, then place into containers for removal.

Major Spills: Dike and contain spill. Eliminate potential sources of ignition, and shut off source of spill if possible. Remove liquid by chemical vacuum, absorbent, or other safe and approved method and place into containers for legal disposal. Flush area with water to remove residue, and remove flushed solutions as above.

Waste Disposal Method: Dispose of all waste in accordance with federal, state and local regulations.

Regulatory Information:

This information may be useful in complying with EPA Regulation 40CFR302 ~~'CERCLA' Section 102 and EPA Regulation 40CFR 372 SARA 313:~~ This product contains approximately 2.0% cumene, 0.8% ethylbenzene, 2.0% xylene and 12% of 1,2,4 trimethylbenzene.

Precautions to be Taken in Handling and Storing: Ventilation in work area should be sufficient to maintain atmosphere with vapor level below lowest listed TLV in Section 2. If TLV's are exceeded, use a respirator with appropriate NIOSH approved cartridges or supplied air equipment. Keep containers closed when not in use. Combustible liquid--empty containers can be hazardous and contain explosive vapors.

HMIS: Health Hazard: 2 Flammability: 2 Reactivity: 0 Personal Protection: B

SECTION 8: CONTROL MEASURES

Respiratory Protection: Needed if TLV's in Section 2 are exceeded. Use a respirator with appropriate NIOSH approved cartridges or air supplied equipment.

Ventilation: Local and mechanical exhaust recommended. Avoid open electrical sources near product vapor areas.

Protective Gloves: Impervious or chemical resistant gloves (consult safety equipment supplier).

Eye Protection: Splash goggles or faceshield are recommended to protect against potential eye contact.

Other Protective Clothing/Equipment: Safety shoes and aprons recommended.

Work/Hygienic Practices: Do not take internally. Avoid skin contact, and wash skin after using products. Do not eat, drink or smoke in work area. Keep away from children.

High VOC Cleaner Used on Web Press at Anderson



Anderson Litho - LA
 ID# 037601
 MSDS
 Ref. No.
 R-0141

MATERIAL SAFETY DATA SHEET

The Anchor MSDS information provided on this site is updated on a monthly basis and complies with OSHA's Hazard Communication Standard (CFR 1910.1200) and the American National Standards Institute (ANSI) Standard for Material Safety Data Sheets (ANSI Z400.1).

Finished Goods Catalog

7422 - ENVIROWASH(R) 220-AUTO BLANKET/ROLLER WASH

Manufacturer Name

ANCHOR LITHKEMKO, A SUBSIDIARY OF FUJI HUNT

SECTION 1 - COMPANY IDENTIFICATION

Catalog / Sub-assembly Number: 7422
 ANCHOR LITHKEMKO, A SUBSIDIARY OF FUJI HUNT
 50 Industrial Loop North
 Orange Park, FL 32073

TRANSPORTATION EMERGENCIES (24HR)
 Inside US/Canada 800-424-9300
 Outside US/Canada 703-527-3087
 (accepts collect calls)
 MEDICAL EMERGENCIES (24HR)
 Prosar 877-935-7387
 NON-EMERGENCY
 EHS Info 904-264-3500
 General Info 800-354-2300

FOR INDUSTRIAL USE ONLY.....USE ONLY AS DIRECTED.....DO NOT TAKE INTERNALLY!

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Wt. %	OSHA PEL (mg/m3)	ACGIH (mg/m3)
Aliphatic Hydrocarbon	64742-88-7	10-20%	100ppm	100ppm
Aromatic Hydrocarbon	64742-84-5	5-10%	100ppm	NE
Dipropylene Glycol Monomethyl Ether	34590-94-8	1-5%	100ppm; 150ppm STEL	100ppm; 150ppm STEL
Fatty Acid Ester	TSRN 06-0836 -331-5005	60-80%	NE	NE
Naphthalene	91-20-3	0.1-1%	50; 75 STEL	52; 79 STEL
1,2,4-Trimethylbenzene	95-63-6	0.1-1%	NE	NE

NE=Not Established STEL=Short Term Exposure Limit C=Ceiling Limits

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

.....
 Appearance: Clear, amber liquid

Anderson Litho - LA
ID# 037601
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Odor: Mild solvent odor

Avoid contact with eyes, skin or clothing. Avoid breathing mist or vapor. Do not swallow. Wear chemical safety goggles & chemical resistant gloves. Wash thoroughly after handling. Keep container closed when not in use. Use only with adequate ventilation. May produce hazardous gases under fire conditions. During emergencies, wear equipment to protect eyes, skin and respiratory tract. Dike or absorb spills to keep material and run-off from entering sewer or waterways. Use water spray to cool containers and disperse vapors. Consult MSDS for additional information.

HMIS: Health: 2 Flammability: 2 Reactivity: 0 Protection: B
NFPA: Health: 2 Flammability: 2 Reactivity: 0 Spec. Haz.: None

Hazard Rating: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
A = Gloves B = Gloves & Goggles C = Gloves, Goggles & Apron
D = Face Shield, Gloves, Goggles & Apron

UN NO: HA1993
DOT GUIDE: ERG Guide 128

Potential Health Effects:

Skin: Contact causes irritation.
Eyes: Causes irritation.
Inhalation: Irritant to respiratory tract and mucous membranes.
Ingestion: Ingestion of product may cause nausea and vomiting.
Conditions aggravated by exposure:
None expected except those associated with acute effects.

SECTION 4 - FIRST AID MEASURES

Eye Contact: Immediately flush with COOL water for 15 minutes. Call a physician.
Skin Contact: In case of skin contact; wash with soap and water for 15 minutes. Call a physician.
Ingestion: In case of ingestion; do not drink water. Do not induce vomiting. Call a physician.
Inhalation: Immediately remove victim to fresh air. Call a physician.

SECTION 5 - FIRE FIGHTING MEASURES

Flammable Properties
Flash Point: 165 deg F TCC
Autoignition Temperature: N/A deg F (CC)
Explosion Limits: Lower: N/A vol.% Not Tested
Upper: N/A vol.%
OSHA Class IIIA Combustible Liquid

Extinguishing Media:
Choose extinguishing media suitable for the surrounding materials, such as water spray, dry chemical, alcohol foam or carbon dioxide.

Unsuitable Extinguishing Media:
No restrictions on media based on knowledge of this material.

Fire Fighting Instructions:
Water spray should be used to cool fire exposed containers and to disperse un-ignited vapors. Use NIOSH/MSHA approved positive pressure self-contained breathing apparatus when material has ignited or becomes involved in a fire. Try to remove material containers from fire area if can be accomplished without risk to personnel.

Evacuate area and fight fire from a safe distance. Call your local fire department. Wear positive pressure, breathing apparatus and protect eyes and skin. Use water to cool fire-exposed containers, to protect personnel and to disperse vapors and spills. Fire media run-off can damage the environment. Dike and collect media used to fight fire.

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SECTION 6 - ACCIDENTAL RELEASE MEASURES

Small Spills:

For small incidental spills and leaks wear chemical safety goggles, and neoprene gloves and apron or coveralls. Isolate area of spill by diking. Stop source of leak. Add dry absorbent. Clean up and place in an approved D.O.T. container and seal. Wash all contaminated clothing before reuse, and discard contaminated leather shoes.

Large Spills:

For larger spills requiring emergency response, neoprene boots and respiratory protection may also be required. Follow OSHA regulations and NIOSH recommendations for respirator use (29 CFR 1910.134 and NIOSH Pub. 87-108) and emergency response (see 29 CFR 1910.120). Isolate area of spill by diking. Stop source of leak. Add dry absorbent. Clean up and place in an approved D.O.T. container and seal. Wash all contaminated clothing before reuse, and discard contaminated leather shoes. Call the emergency telephone number shown on the front of this sheet.

SECTION 7 - HANDLING / STORAGE

Handling:

Avoid contact with eyes, skin or clothing. Avoid breathing mist or vapor. Do not swallow. Wear chemical safety goggles and neoprene gloves and apron. Wash thoroughly after handling. Keep container closed when not in use. Use only with adequate ventilation.

Storage:

Store in a cool, dry, well-ventilated area away from all sources of ignition. Keep containers closed when not in use.

SECTION 8 - EXPOSURE CONTROL AND PERSONAL PROTECTION

Ventilation:

Good general ventilation should be sufficient for most processing operations. Vent work area to ensure airborne concentrations are below the current occupational exposure limits. Ten (10) or more room air changes per hour containing a minimum of 15% fresh air will meet these requirements. Consult ASHRAE 62-1989 for further requirements.

Personal Protective Equipment

Respiratory Protection: If used under normal operating conditions and with adequate ventilation, respiratory protection is not required. However, refer to OSHA 29 CFR 1910.13

4.

Skin Protection: Chemical resistant gloves
Eye Protection: Chemical safety goggles

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, amber liquid

Odor: Mild solvent odor

Change in Physical State:

Boiling Point: 400 deg F
Melting Point: N/D deg F
Specific Gravity: 0.88 Water=1
Vapour Pressure: 0.20 mmHg @ 20C
Viscosity: N/A
Solubility in Water: Insoluble
pH Value: ND
VOC (lbs/gal): 2.20 (USEPA Method 24)
Non-Photochemically Reactive

SECTION 10 - STABILITY AND REACTIVITY

Hazardous Polymerization:

Anderson Litho - LA
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Hazardous polymerization WILL NOT occur if product is used and stored as directed. Product is stable if used and stored as directed.

Hazardous Decomposition Products:

Oxides of Nitrogen; Oxides of Carbon

Materials and Conditions to Avoid:

Keep containers and liquids away from all potential sources of ignition. Keep away from excess heat. Avoid contact with strong oxidizers, strong acids and strong bases.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product Information

LD50 (oral, rat): >5000 mg/kg

Acute Overexposure:

Skin, eye, mucous membrane and respiratory tract irritant.

Chronic Overexposure:

Prolonged or repeated exposure can cause allergic skin reaction, anemia and weakness.

Ingredient information:

Swallowing of Hydrocarbons can cause lung damage. Repeated exposure to Hydrocarbons can cause dermatitis. Chronic overexposure to Dipropylene Glycol Monomethyl Ether in high concentrations has caused minor kidney and liver damage in laboratory animals. "In vitro" mutagenicity studies of Dipropylene Glycol Monomethyl Ether were negative.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity Data: No Data Available

Chemical Fate Data: No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Hazardous Waste Characteristic:

None

Recommendation:

Dispose of contaminated product, empty containers and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures. Discharge of processing effluent to the sewer may require a permit. DO NOT discharge effluent solutions to septic systems.

SECTION 14 - TRANSPORTATION INFORMATION

Ground Shipping Information

Proper Shipping Name: Combustible Liquid, N.O.S. (contains Petroleum Naphtha)

Hazard Class: 3

UN/NA Number: NA1993

Packing Group: PGIII

Air (ICAO/IATA) Shipping Information

Proper Shipping Name: Chemicals, N.O.I., Not D.O.T. regulated.

Hazard Class: None

UN No: None

Packing Group: None

Subsidiary Risk: None

UN/DOT Labels Needed: Combustible

International Maritime Organization (IMO) Additional Shipping Class:

IMDG Code: Not Applicable

Amdt. Code: Amdt. N/A

HTS Code: Not Applicable

Product is labeled in accordance with US D.O.T. 49 CFR.

Further information:

Anderson Litho - LA
ID# 037601
MSDS
Ref. No.
R-0141

Please call (904) 264-3500 for further D.O.T. information.

SECTION 15 - REGULATORY INFORMATION

**Note: The ingredient information listed in this section is provided for reporting requirements as dictated by USEPA, state and local regulation. If ingredient is listed in this section but not in Section 2, then the concentration of this ingredient is below de minimis (less than 0.1%).

U.S. FEDERAL REGULATIONS:

313 = SARA Title III Section 313 (40 CFR 372 -- Toxic Release Inventory)
355 = SARA Title III Section 302 (40 CFR 355 -- Extremely Hazardous Substance)
302 = SARA Title III Section 304 (40 CFR 302 -- Hazardous Substance List)
CWA = Clean Water Act Priority Pollutants List
CAA = Clean Air Act 1990 Hazardous Air Contaminants
HAP = Clean Air Act - MGN Rule - HAPs

Ingredients	CAS Number	313	355	302	CWA	CAA	HAP
Aliphatic Hydrocarbon	64742-88-7	N	N	N	N	N	N
Aromatic Hydrocarbon	64742-94-5	N	N	N	N	N	N
Dipropylene Glycol Monomethyl Ether	34590-94-8	N	N	N	N	N	N
Fatty Acid Ester	TSRN 06-0836 -331-5005	N	N	N	N	N	N
Naphthalene	91-20-3	Y	N	Y	Y	Y	Y
1,2,4-Trimethylbenzene	95-63-6	Y	N	N	N	N	N

TSCA 12(b) Export Notification

CAS NUMBER	CHEMICAL NAME
628-63-7	N-AMYL ACETATE
131-11-3	DIMETHYL PHTHALATE (DMP)

TOXICITY INFORMATION:

IRC1 = IARC Group 1 Human Carcinogens List
IRC2 = IARC Group 2 Human Carcinogens List (limited human data)
IRC3 = IARC Group 2B Human Carcinogens List (sufficient animal data)
NTP = NTP Known Carcinogens List
OSHA = OSHA Known Carcinogens List

Ingredients	CAS Number	IRC1	IRC2	IRC3	NTP	OSHA
Aliphatic Hydrocarbon	64742-88-7	N	N	N	N	N
Aromatic Hydrocarbon	64742-94-5	N	N	N	N	N
Dipropylene Glycol Monomethyl Ether	34590-94-8	N	N	N	N	N
Fatty Acid Ester	TSRN 06-0836 -331-5005	N	N	N	N	N
Naphthalene	91-20-3	N	N	N	N	N
1,2,4-Trimethylbenzene	95-63-6	N	N	N	N	N

STATE REGULATIONS:

FL = Florida Hazardous Substance List MA = Massachusetts Right-To-Know List
MI = Michigan Critical Materials List MN = Minnesota Hazardous Substance List
NJ = New Jersey Right-To-Know List PA = Pennsylvania Right-To-Know List

Ingredients	CAS Number	PA	NJ	MN	MI	MA	FL
Aliphatic Hydrocarbon	64742-88-7	N	N	N	N	N	N
Aromatic Hydrocarbon	64742-94-5	N	N	N	N	N	N
Dipropylene Glycol Monomethyl Ether	34590-94-8	Y	Y	Y	N	Y	Y
Fatty Acid Ester	TSRN 06-0836 -331-5005	N	N	N	N	N	N
Naphthalene	91-20-3	Y	Y	Y	Y	Y	Y
1,2,4-Trimethylbenzene	95-63-6	Y	Y	N	N	Y	N

High VOC Cleaner Used on Sheet Fed Presses at Anderson

MATERIAL SAFETY DATA SHEET

Lithograph
ID# 037601
MSDS
Ref. No.:
R-0915

CP-580 HYBRID WASH

Revised: August 20, 2001

PRODUCT CODE: B010057

HMS CODES: H F R P
2 1 0 X

SECTION 1 - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: VARN PRODUCTS
ADDRESS : 905 S. WESTWOOD AVENUE
ADDISON, ILLINOIS 60101

EMERGENCY PHONE: 800-424-9300 DATE PRINTED: 08/29/2001
INFORMATION PHONE: 800-336-8276 NAME OF PREPARER: Varn Products Co.
REASON REVISED: Custom Product - Supersedes All Previous Revisions.

SECTION 2 - HAZARDOUS INGREDIENTS/SARA III INFORMATION

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* 2-Butoxy Ethanol OSHA PEL: 50ppm SKIN, ACGIH TLV: 20ppm SKIN Hazardous Air Pollutant	111-76-2	0.8 68°F	85
Normal Propyl Alcohol OSHA PEL: 200ppm, ACGIH TLV: 200ppm, STEL: 250ppm	71-23-8	14.5 68°F	15

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372.
All ingredients are listed on the EPA TSCA Inventory.

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE/POINT: 207°F - 340°F SPECIFIC GRAVITY (H2O=1): 0.89
VAPOR DENSITY: Heavier than air.
EVAPORATION RATE: Slower than n-Butyl Acetate.
V.D.C. (EPA METHOD 24): 7.39 lb/gal
VAPOR PRESSURE (mm Hg @ 20°C): 4.3
SOLUBILITY IN WATER: 100%
APPEARANCE AND ODOR: Clear Liquid - Mild Odor

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 110°F METHOD USED: TAG CC
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1.0% UPPER: 13.5%
EXTINGUISHING MEDIA: Alcohol Foam, CO2, Dry Chemical.

SPECIAL FIREFIGHTING PROCEDURES:
As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved) and full protective gear. Water may not be effective to extinguish fire. Use water spray to cool fire-exposed containers and to protect personnel.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Treat as Petroleum Fire.

MATERIAL SAFETY DATA SHEET

CP-580 HYBRID WASH

Page: 2
Revised: August 29, 2001

SECTION 5 - REACTIVITY DATA

STABILITY:

Stable

CONDITIONS TO AVOID:

Avoid heat, sparks, flame and other sources of ignition.

INCOMPATIBILITY (MATERIALS TO AVOID):

Avoid mixing with strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Burning will produce oxides of carbon and dense smoke.

HAZARDOUS POLYMERIZATION:

Will Not Occur.

Anderson
Lithograph
ID# 057801
MSDS
Ref. No.:
R-0915

SECTION 6 - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Breathing high concentrations of vapors will cause irritation of the nose and throat. Signs of central nervous system depression such as headache, drowsiness, dizziness and nausea may be experienced with overexposure.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Skin and eye contact may cause moderate to severe irritation.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Skin contact will result in absorption and potentially contribute to the overall exposure to the chemical 2-Butoxy ethanol.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Ingredients in this product are toxic. Ingestion may cause nausea, moderate gastro-intestinal irritation, diarrhea and possible damage to vital organs. Follow first aid procedures.

HEALTH HAZARDS (ACUTE AND CHRONIC):

Repeated or abusive breathing of concentrated vapors may affect pulmonary, cardiovascular, and central nervous system. Repeated skin contact will dry out and crack skin.

CARCINOGENICITY: NTP CARCINOGEN: No **IARC MONOGRAPHS:** No **OSHA REGULATED:** No

This product contains no known carcinogens.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Skin contact may aggravate pre-existing dermatitis. Inhalation of vapors may aggravate pre-existing asthma like conditions.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Hold eyelids open and flush with water for 15 minutes. Contact physician if irritation persists. **SKIN:** Wash with soap and water. **INGESTION:** If victim is fully conscious, induce vomiting as directed by medical personnel. Seek medical attention immediately. **INHALATION:** Move victim to fresh air. Give oxygen if breathing is labored.

MATERIAL SAFETY DATA SHEET

CP-580 HYBRID WASH

Page: 3
Revised: August 29, 2001

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

Anderson
Lithograph
ID# 037601
MSDS
Ref. NO.:
R-0915

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Eliminate all ignition sources. Spills should be diked and must be kept from entering the sewer. Soak up with absorbent or transfer liquid into a closed container for later disposal. Use spark-proof tools and explosion proof equipment.

WASTE DISPOSAL METHOD:

If this product as supplied, becomes a waste it is regulated by RCRA as Ignitable Waste, EPA I.D. #D001. Suitable methods of disposal include reclamation and fuel blending. Contact a Licensed Hazardous Waste Hauler for more information.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Containers should be grounded and bonded before transferring product. Store in the original closed container away from sunlight, excess heat, sparks, flames and other sources of ignition. Avoid skin or eye contact. Avoid breathing vapors. When transferring or using this product, wear proper personal protective equipment. Store and handle as a Combustible Liquid.

OTHER PRECAUTIONS/DOT INFORMATION:

DOT Proper Shipping Name: Combustible Liquid, n.o.s. (n-propyl alcohol). Hazard Class: Combustible Liquid, UN Number: NA1993, Packing Group: II, Non-Bulk Limited Quantity. Not regulated as per H9CFR 173.150(f)(2). Product is classified as an OSHA Class II Combustible Liquid.

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION:

The use of respiratory protection is advised when concentrations exceed the established exposure limits in SECTION 2. Depending on the airborne concentration, use a respirator with appropriate organic vapor cartridge (NIOSH approved).

VENTILATION:

If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits in SECTION 2, additional general ventilation or local exhaust systems may be required.

PROTECTIVE GLOVES:

Wear solvent resistant gloves made of butyl or nitrile rubber.

EYE PROTECTION:

Wear safety glasses with side shields.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

A personal protective rating of X means you must see your supervisor for guidance. OSHA regulations (29CFR Part 1910, Subpart I) require employers to evaluate Personal Protective Equipment requirements in the workplace.

WORK/HYGIENIC PRACTICES:

Wash with soap and water after product contact with skin.

SECTION 9 - DISCLAIMER

The information on this MSDS is believed to be accurate as of the date shown in SECTION 1. Since the use of this product is not under the control of Vern, it is the user's responsibility to determine what constitutes safe usage for a particular product. This form may be reproduced in quantities necessary to meet your requirements.

TOTAL P. 84

High VOC Cleaner Used at Tedco

LITHO-CHEM, INC.
 9441 SANTA FE SPRINGS ROAD, SANTA FE SPRINGS, CA 90670
 TEL: 562.946.5537 FAX: 562.946.2333

LC-97

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MATERIAL SAFETY DATA SHEET



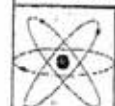
DATE PREPARED: November 2001 FOR EMERGENCY: 800-424-9300

SECTION I - IDENTIFICATION

PRODUCT U. V. ROLLER WASH
CODE LC-97
CHEMICAL FAMILY Blend of aromatic hydrocarbon and glycol ether solvents with non-hazardous proprietary ingredients.
DOT CLASSIFICATION Paint related material, 3, UN1263, III

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV	CAS NO.
Aromatic hydrocarbons	30-60	100	64742-95-6
Glycol ether	30-60	100	3459-94-8

HEALTH  2	FIRE  2	REACTIVITY  0	PERSONAL PROTECTION B	HAZARD RATING LEAST = 0 SLIGHT = 1 MODERATE = 2 HIGH = 3 EXTREME = 4
--	--	--	---------------------------------	--

SECTION III - PHYSICAL PROPERTIES

BOILING POINT 351°F
PARTIAL PRESSURE (mmHg@20°C) 2.3
DENSITY (Lbs/Gal) 7.5
SPECIFIC GRAVITY 0.91
SOLUBILITY IN WATER Appreciable
APPEARANCE AND ODOR Clear, lavender liquid with a mild odor
VOLATILE ORGANIC COMPOUNDS (VOC) 6.7 lb/gal (799 gm/l) EPA Method 24

SECTION IV - FIRE AND EXPLOSION HAZARDS

FLASH POINT (TCC) 110°F
EXPLOSIVE LIMITS IN AIR (% BY VOLUME) LL=1.0% UL=14.0%
EXTINGUISHING MEDIA Alcohol resistant foam, carbon dioxide, dry chemical
SPECIAL FIRE FIGHTING PROCEDURES Use self-contained breathing apparatus and protective clothing
UNUSUAL FIRE AND EXPLOSION HAZARD Material is highly volatile. Vapors may travel at ground level and be ignited by pilot lights, sparks, heaters, electrical motors, etc.

LC-97

Page 2 of 3

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL Not established

THRESHOLD VALUE Not established

EFFECTS OF OVEREXPOSURE:

EYES: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness and swelling.

SKIN: Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying, cracking and skin burns. Pre-existing skin disorders may be aggravated by exposure to this material. Absorption is possible but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

BREATHING: Exposure to vapors or mist is possible. Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects; breathing large amounts may be harmful. Symptoms are more typically seen at air concentrations exceeding the recommended exposure limits. Symptoms of exposure may include:

-Irritation of nose, throat, respiratory tract

-Pre-existing lung disorders, e.g. asthma-like conditions, may be aggravated by exposure to this material resulting in cough, central nervous system (CNS) depression (dizziness, weakness, drowsiness, fatigue, nausea, headache, unconsciousness) and other CNS effects (coma).

SWALLOWING: Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. Symptoms may include: throat irritation, gastrointestinal irritation (nausea, vomiting, diarrhea), central nervous system depression (dizziness, weakness, fatigue, nausea, headache, unconsciousness), high blood sugar, coma. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

FIRST AIDE: If on skin: Remove contaminated clothing, wash exposed area with soap and water.

If symptoms persist, seek medical attention. Launder clothing before re-use.

If in eyes: If symptoms develop, move individual away from exposure and into fresh air. Flush eyes with water for at least 15 minutes while holding eyelids apart. If symptoms persist, seek medical attention.

If swallowed: **DO NOT INDUCE VOMITING.** This material is an aspiration hazard. If individual is drowsy or unconscious, place on left side with head down. Seek medical attention. If possible, do not leave individual unattended.

If breathed: If symptoms develop, immediately move individual away from exposure and into fresh air. Seek medical attention. Keep individual warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

*****NOTE TO PHYSICIAN*****

This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.

PRIMARY ROUTES OF ENTRY: Inhalation, skin absorption, skin contact, eye contact.

EFFECTS OF CHRONIC EXPOSURE: This material (or a component) shortens the time of onset or worsens the liver and kidney damaged induced by other chemicals. This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies; harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals and may aggravate pre-existing disorders if these organs in humans: mild, reversible liver effects and mild, reversible kidney effects.

SECTION VI - REACTIVITY DATASTABILITY

Stable under normal conditions of storage and handling

INCOMPATIBLE MATERIALS

Avoid contact with strong oxidizing agents and strong acids

HAZARDOUS POLYMERIZATION

Cannot occur

LC-97

Page 3 of 3

SECTION VII - SPILL OR LEAK PROCEDURE**STEPS TO BE TAKEN IN CASE OF RELEASE OR SPILL**

- Small spill: Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood
- Large spill: Eliminate all ignition sources (flares, flames, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent spill from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to approved containers for disposal.

WASTE DISPOSAL METHOD

- Small spill: Dispose of in accordance with all local, state and federal regulations
- Large spill: Dispose of in accordance with all local, state and federal regulations

SECTION VIII - PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY PROTECTION If workplace exposure limit(s) of product (or a component) is exceeded (see Section II), a NIOSH/MSHA air supplied respirator is advised. In absence of proper environmental control, OSHA regulation also permits other NIOSH/MSHA respirators (negative pressure type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

VENTILATION Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure levels below TLV's (see Section II) or to below level of overexposure (from known, suspected or apparent adverse effects).

PROTECTIVE GLOVES Wear resistant gloves (consult safety equipment supplier).

EYE PROTECTION Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also permit other types of safety glasses (consult safety equipment supplier).

OTHER PROTECTIVE EQUIPMENT To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

SECTION IX - SPECIAL PRECAUTIONS OR OTHER COMMENTS

Containers of this material may be hazardous when emptied since emptied containers retain product residues (vapor, liquid and/or solids). All hazard precautions given in this sheet must be observed.

WARNING!!! Sudden release of hot organic vapors or mists from processor equipment operating at elevated temperatures and pressures, or sudden ingress of air into vacuum equipment may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product at elevated process temperatures should be thoroughly evaluated to establish and maintain safe operating conditions.

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE AND SUITABLE TO THEIR CIRCUMSTANCES.

High VOC Cleaner Used at Huhtamaki

MATERIAL SAFETY DATA SHEET

WASH EB

Page: 1

PRODUCT NAME: WASH EB
 PRODUCT CODE: B111
 CHEMICAL NAME: BLANET AND ROLLER WASH

HMIS CODES: H P R P
 2 2 0 B

***** SECTION I - MANUFACTURER IDENTIFICATION *****

MANUFACTURER'S NAME: PRINTERS' SERVICE
 ADDRESS : 26 Blanchard Street
 Newark, New Jersey 07105

EMERGENCY PHONE : 1-800-424-9300 LAST REVISION : 06/25/97
 INFORMATION PHONE : 1-973-589-7800 DATE REVISED : 03/17/99
 PREPARER : ENVIRONMENTAL DEPT.

***** SECTION II - HAZARDOUS INGREDIENTS/BARA III INFORMATION *****

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* 2-BUTYRETHANOL PEL 25ppm TLV 25ppm // LD50 1.74g/kg; LC50 800ppm/8hr // HAP reportable	111-76-2	0.6 mmHg 20 C	80 - 90%
n-PROPYL ALCOHOL PEL 200PPM TLV 200PPM // LD50 1.87g/kg; LC50> 20000ppm/hr	71-23-8	15mmHg 20 C	10 - 20%

* Indicates chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

***** SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS *****

BOILING POINT : 204 F SPECIFIC GRAVITY (H2O=1): 0.86
 VAPOR DENSITY : 3.7 (air = 1) VAPOR PRESSURE : 4.1 mmHg at 20 C
 DRYING RATE : 0.3 (n-Butyl Acet.-1) VOC : 7.36 lb/gal METHOD: EPA 824
 PHOTOREACTIVE : NO H2O SOLUBILITY : 100% 1 lb/gal = 120 gm/l
 VOLATILES : 100% APPEARANCE : CLEAR
 PHYSICAL STATE : LIQUID ODOR : ALCOHOL ODOR

***** SECTION IV - FIRE AND EXPLOSION HAZARD DATA *****

FLASH POINT : 105 F METHOD USED: TCC
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1.1 UPPER: 13.5
 EXTINGUISHING MEDIA: CARBON DIOXIDE, FOAM, OR DRY POWDER (WATER MAY BE INEFFECTIVE)
 SPECIAL FIREFIGHTING PROCEDURES : KEEP CONTAINER COOL. CONTROL COOLING WATER SINCE IT MAY TEND TO SPREAD BURNING MATERIAL.
 UNUSUAL FIRE AND EXPLOSION HAZARDS : IF BOILING POINT OF SOLVENT IS REACHED, THE CONTAINER MAY RUPTURE EXPLOSIVELY AND IF IGNITED, GENERATE A FIREBALL.

***** SECTION V - REACTIVITY DATA *****

STABILITY: YES IF NO CONDITIONS:
 INCOMPATIBILITY (MATERIALS TO AVOID): YES
 IF YES WHICH ONE(S): STRONG OXIDIZER
 HAZARDOUS DECOMPOSITION OR BYPRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE ON IGNITION
 HAZARDOUS POLYMERIZATION: NONE

***** SECTION VI - HEALTH HAZARD DATA *****

INDICATIONS OF EXPOSURE:
 INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: HEADACHE, DIZZINESS, NAUSEA, VERY HIGH LEVELS OF VAPORS COULD CAUSE UNCONSCIOUSNESS
 SLIGHT IRRITATION OF THE MUCOUS MEMBRANE
 EYE CONTACT AND SYMPTOMS OF EXPOSURE: REDNESS OR BURNING SENSATION
 SKIN HEALTH RISKS AND SYMPTOMS OF EXPOSURE: REDNESS, ITCHING, IRRITATION ON OVEREXPOSURE.
 INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: SEVERE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.
EMERGENCY AND FIRST AID PROCEDURES
 IF IN EYES: FLUSH WITH WATER FOR 15 MIN. LEFT UPPER AND LOWER EYE LIDS. SEE A DOCTOR.
 IF ON SKIN: WASH WITH SOAP AND WATER.
 IF INHALED: REMOVE TO FRESH AIR. IF UNCONSCIOUS, USE ARTIFICIAL RESPIRATION.
 IF INGESTED: DO NOT INDUCE VOMITING. SEE DOCTOR IMMEDIATELY TO PUMP STOMACH.
HEALTH HAZARDS (ACUTE AND CHRONIC):

MATERIAL SAFETY DATA SHEET

WASH 8B

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EFFECT OF CHRONIC EXPOSURE: NONE

EFFECT OF ACUTE EXPOSURE: NONE

IN ALL CASES OF EMERGENCY AND FIRST AID, WE STRONGLY RECOMMEND A DOCTOR BE SEEN

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: DERMATITIS MAY AGGRAVATE EXISTING LIVER AND KIDNEY ALLMENTS.

----- SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE -----
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: VENTILATE AREA. KEEP AWAY FROM STRONG OXIDIZERS, HEAT, SPARKS OR OPEN FLAMES. PREVENT SPILL FROM SPREADING BY USING AN INERT MATERIAL, SUCH AS SAND, AS A DAM. KEEP OUT OF ALL WATERWAYS OR WATER DRAINS. DO NOT FLUSH AREA WITH WATER. FOR SMALL SPILLS USE ABSORBENT PADS. FOR LARGE SPILLS, CALL A SPILL RESPONSE TEAM. IF REQUIRED, CONTACT STATE/LOCAL AGENCIES.

WASTE DISPOSAL METHOD: PRODUCT SOAKED ABSORBENT SHOULD BE PLACED IN SEALED METAL DRUMS FOR DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: KEEP AWAY FROM STRONG OXIDIZERS, HEAT, SPARKS AND OPEN FLAMES. DO NOT CUT OR DRILL INTO AN EMPTY CONTAINER IN ANY WAY THAT MIGHT GENERATE A SPARK. SOLVENT RESIDUE IN THE CONTAINER COULD IGNITE AND CAUSE AN EXPLOSION. KEEP CONTAINER TIGHTLY CLOSED AND OUT OF THE WEATHER.

OTHER PRECAUTIONS: WE RECOMMEND THAT CONTAINERS BE EITHER PROFESSIONALLY RECONDITIONED FOR REUSE OR PROPERLY DISPOSED OF BY CERTIFIED FIRMS TO HELP REDUCE THE POSSIBILITY OF AN ACCIDENT. DISPOSAL OF CONTAINERS SHOULD BE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS. "EMPTY" DRUMS SHOULD NOT BE GIVEN TO INDIVIDUALS.

----- SECTION VIII - CONTROL MEASURES -----
EXPOSURE CONTROL AND PERSONAL PROTECTION:

RESPIRATORY PROTECTION: IF TLV IS EXCEEDED USE A GAS MASK WITH APPROPRIATE CARTRIDGES, CANNISTER OR SUPPLIED AIR EQUIPMENT.

VENTILATION: IF NORMAL VENTILATION IS INADEQUATE USE ADDITIONAL SYSTEMS, ESPECIALLY LOCAL VENTILATION. IF THE VAPOR LEVEL CAN APPROACH THE LEL - LOWER EXPLOSION LIMIT, USE EXPLOSION PROOF SYSTEMS.

PROTECTIVE GLOVES: USE SOLVENT RESISTANT GLOVES.

EYE PROTECTION: USE SAFETY GLASSES OR GOGGLES.

OTHER PROTECTIVE EQUIPMENT OR CLOTHING: NONE.

WORK/HYGIENIC PRACTICES: WASH SKIN/CLOTHES IF THEY COME IN CONTACT WITH THE PRODUCT. DO NOT WEAR CLOTHING MET WITH THE PRODUCT.

----- SECTION IX - SHIPPING INFORMATION -----
GROUND SHIPMENT. UN No : NA 1993

D.O.T HAZARD CLASSIFICATION: COMBUSTIBLE LIQUID- R.G.S.

----- SECTION X - DISCLAIMER -----

THE INFORMATION AND RECOMMENDATIONS HEREIN HAVE BEEN COMPILED FROM OUR RECORDS AND OTHER SOURCES BELIEVED TO BE RELIABLE. NO WARRANTY, GUARANTY OR REPRESENTATION IS MADE BY PRINTERS' SERVICE AS TO THE SUFFICIENCY OF ANY REPRESENTATION. THE ABSENCE OF DATA INDICATES ONLY THAT THE DATA IS NOT READILY AVAILABLE TO US. ADDITIONAL SAFETY MEASURES MAY BE REQUIRED UNDER PARTICULAR OR EXCEPTIONAL CONDITIONS OF USE. WITH REGARD TO THE MATERIALS THEMSELVES, PRINTERS' SERVICE MAKES NO WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.

MATERIAL SAFETY DATA SHEET

E-CURE CLASSIC CA

PRODUCT NAME: E-CURE CLASSIC CA

PRODUCT CODE: R149

CHEMICAL NAME: BLANKET AND ROLLER WASH

Page: 1

HMIS CODES: H F R P 2 2 0 0

SECTION I - MANUFACTURER IDENTIFICATION
MANUFACTURER'S NAME: PRINTERS' SERVICE
ADDRESS: 26 Blanchard Street, Newark, New Jersey 07102

EMERGENCY PHONE: 1 800 424 9300
INFORMATION PHONE: 1 973 589-7800

LAST REVISION:
DATE REVISED: 04/10/02
PREPARER: ENVIRONMENTAL DEPT.

SECTION II - HAZARDOUS INGREDIENTS/BARA III INFORMATION

Table with 4 columns: REPORTABLE COMPONENTS, CAS NUMBER, VAPOR PRESSURE, WEIGHT PERCENT. Rows include 2-METHOXYETHANOL and ETHANOL ALCOHOL.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 71.2 316 F
VAPOR DENSITY: 2.22 (air = 1)
REFRACTIVE INDEX: 1.408 (20 C)
SPECIFIC GRAVITY (4/4): 0.93
VAPOR PRESSURE: 9.47 mmHg (66 Torr) at 20 C
VOC: 6.56 lb/gal
METHOD: EPA 821

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 126 F
METHOD USED: TCC
FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: 1.1 UPPER: 10.6
EXTINGUISHING MEDIA: CARBON DIOXIDE FROM DRY POWDER (WATER MAY BE INEFFECTIVE)
SPECIAL FIREFIGHTING PROCEDURES: AFFF CONTAINER COOL. CONTROL COOLING WATER SINCE IT MAY TEND TO SPREAD BURNING MATERIAL.

SECTION V - REACTIVITY DATA

STABILITY: YES IF NO CONDITIONS
INCOMPATIBILITY (MATERIALS TO AVOID): YES
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE ON IGNITION
HAZARDOUS POLYMERIZATION: NONE

SECTION VI - HEALTH HAZARD DATA

INDICATIONS OF EXPOSURE:
INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: HEADACHE, DIZZINESS, NAUSEA. VERY HIGH LEVELS OF VAPORS COULD CAUSE UNCONSCIOUSNESS.
EYE CONTACT AND SYMPTOMS OF EXPOSURE: REDNESS OR BURNING SENSATION.
SKIN HEALTH RISKS AND SYMPTOMS OF EXPOSURE: REDNESS, ITCHING, IRRITATION OR OVEREXPOSURE.
INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: SEVERE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.
EMERGENCY AND FIRST AID PROCEDURES:
IF IN EYES, FLUSH WITH WATER FOR 15 MIN. LIFT UPPER AND LOWER LIMBS. SEE A DOCTOR.
IF ON SKIN, WASH WITH SOAP AND WATER.
IF SWALLOWED, RINSE TO FRESH AIR. IF UNCONSCIOUS, USE ARTIFICIAL RESPIRATION.
IF INGESTED, DO NOT INDUCE VOMITING. SEE DOCTOR IMMEDIATELY. DO NOT STIMULATE.

MATERIAL SAFETY DATA SHEET
E-CURE CLASSIC CR

Page: 2

HEALTH HAZARDS (ACUTE AND CHRONIC):

EFFECT OF CHRONIC EXPOSURE: PROLONGED HIGH VAPOR EXPOSURE MAY CAUSE LIVER AND KIDNEY PROBLEMS
EFFECT OF ACUTE EXPOSURE: NONE

IN ALL CASES OF EMERGENCY AND FIRST AID, WE STRONGLY RECOMMEND A DOCTOR BE SEEN

CARCINOGENICITY: NTP CARCINOGEN; No IARC MONOGRAPHS; No OSHA REGULATED; No
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: DERMATITIS, FISTULING LIVER AND KIDNEY
ALLERGIC

***** SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE *****
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: VENTILATE AREA. KEEP AWAY FROM
STRONG OXIDIZERS, HEAT, SPARKS OR OPEN FLAMES. PREVENT SPILL FROM SPREADING BY USING AN INERT MATERIAL, SUCH AS SAND, AS A DAM.
KEEP OUT OF ALL DRAINAGE OR WATER DRAINS. DO NOT FLUSH AREA WITH WATER. FOR SMALL SPILLS USE ABSORBENT PADS. FOR LARGER SPILLS
CALL A SPILL RESPONSE TEAM. IF REPORTED CONTACT STATE/LOCAL AGENCIES.
WASTE DISPOSAL METHOD: PRODUCT SOAKED ADSORBENT SHOULD BE PLACED IN SEALED METAL DRUMS FOR DISPOSAL IN ACCORDANCE
WITH LOCAL, STATE AND FEDERAL REGULATIONS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: KEEP AWAY FROM STRONG OXIDIZERS, HEAT, SPARKS AND
OPEN FLAMES. DO NOT CUT OR DRILL INTO AN EMPTY CONTAINER IN ANY WAY THAT MIGHT GENERATE A SPARK. SOLVENT RESIDUE IN THE CONTAINER
MAY IGNITE AND CAUSE AN EXPLOSION. KEEP CONTAINER TIGHTLY CLOSED AND OUT OF THE WEATHER.
OTHER PRECAUTIONS: WE RECOMMEND THAT CONTAINERS BE EITHER PROFESSIONALLY RECONDITIONED FOR REUSE OR PROPERLY DISPOSED OF
BY CERTIFIED FIRMS TO HELP REDUCE THE POSSIBILITY OF AN ACCIDENT. DISPOSAL OF CONTAINERS SHOULD BE IN ACCORDANCE WITH APPLICABLE
LAWS AND REGULATIONS. "DRUMS" SHOULD NOT BE GIVEN TO INDIVIDUALS.

***** SECTION VIII - CONTROL MEASURES *****
EXPOSURE CONTROL AND PERSONAL PROTECTION:
RESPIRATORY PROTECTION: IF T1V IS EXCEEDED USE A GAS MASK WITH APPROPRIATE CAPACITIES, CANISTER OR SUPPLIED AIR EQUIPMENT.
VENTILATION: IF NORMAN VENTILATION IS INADEQUATE USE ADDITIONAL SYSTEMS ESPECIALLY LOCAL VENTILATION IF THE VAPOR LEVEL CAN APPROACH
ITS LEL - LOWER EXPLOSION LIMIT. USE EXPLOSION PROOF SYSTEMS.
PROTECTIVE GLOVES: USE SOLVENT RESISTANT GLOVES.
EYE PROTECTION: USE SAFETY GLASSES OR GOGGLES.
OTHER PROTECTIVE EQUIPMENT OR CLOTHING: NONE.

WORK/HYGIENIC PRACTICES: WASH SKIN/CLOTHES IF THEY COME IN CONTACT WITH THE PRODUCT. DO NOT WEAR CLOTHING WITH
THE PRODUCT.

***** SECTION IX - SHIPPING INFORMATION *****
GROUND SHIPMENT.
D.O.T HAZARD CLASSIFICATION: COMBUSTIBLE LIQUID - 3.0.5
UN No : NA 1993

***** SECTION X - DISCLAIMER *****
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Low-VOC Cleaners Used and Tested at Participating Facilities

Low-VOC Cleaner Used at Los Angeles Times

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 & H Adm.
 (Non Mandatory Form)
 Form Approved
 OMB No. 1218-0072

IDENTITY (As used on label and list) **SUPER CLEAN BW**

SECTION I

Manufacturer's Name: SUPER CHEM CORP.	Emergency Telephone Number: (714) 995-5988
Address: 2635 W. Woodland Drive Anaheim, CA 92801	Telephone Number For Information: (714) 995-5988
Date Prepared: Revised: March 11, 2001	
Signature Of Prepared: (Optional)	

SECTION II - HAZARDOUS INGREDIENTS / IDENTIFY INFORMATION

Hazardous Components Specific Chemical Identity; Common Names	OSHA	ACGIH TLV	Other Limits Recommended	% Optional
Ethylphenoxypolyethoxy - Ethanol				
CAS # 9036-19-5	None	None		
D-Limonene				
CAS # 5989-27/5	None	None		

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point:	>200F	Specific Gravity (H2O = 1):	0.96
Vapor Pressure (mm Hg):	20C	Melting Points:	NA
Vapor Density (AIR = 1):	N.E.	Evaporation Rate (Butyl Acetate = 1):	<1
Solubility in water :	Emulsifiable	VOC: 3.65 lb per gal	495 gm per liter
Appearance and Odor:	Blue Green Clear Liquid with Citrus Odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	180F	Flammable Limits:	LEL: 0.7 UEL: 6.1
Extinguishing Media:	Class B fires: Foam Co2 or Dry Compound		
Special Fire Fighting Procedures:	If confined in a container, cool exterior with water spray		

Unusual Fire and Explosion Hazards: **Dense black smoke produced**

SECTION V - REACTIVITY DATA

Stability:	Unstable:	Conditions to avoid:
	Stable: XX	High heat & direct sunlight
Incompatibility (Materials to avoid):	Oxidizing agents, acids, peroxides, halogens	
Hazardous Decomposition or Byproducts:		
Hazardous Polymerization:	May Occur:	Conditions to avoid:
	Will Not Occur: XX	High temp. contact w/reactive monomer

SECTION VI - HEALTH AND HAZARD DATA

Route of Entry:	Inhalation	Skin	Ingestion
Health Hazards (Acute & Chronic):	Over exposure may irritate eyes and mucus membranes, may cause localized itching on skin		
Carcinogenicity:	NTP?: No	IARC Monographs?:	No
	OSHA Regulated?: NO		
Signs & Symptoms of Exposure:	Slight irritation or itching		
Medical Conditions Generally Aggravated by Exposure:	None Known		
Emergency & First Aid Procedures:	Flush eyes with water for at least 15 minutes and wash from skin with soap and water. If irritation persists see a physician. See Physician if ingested.		

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled:	Keep open flames and sparks away. Contain and absorb with sand or earth
Waste Disposal Method:	Dispose spent absorbent in sealed containers in accordance to Federal, State and Local regulations.
Precautions to be Taken in Handling & Storage:	Store in cool well ventilated place away from reactive chemicals, spark sources & open flames, Keep containers closed.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (specify type):	None		
Ventilation:	Local Exhaust:	Adequate	Special: None
	Mechanical (general):	Recommended	Other:
Protective Gloves:	Rubber Gloves	Eye Protection:	Safety Glasses
Protective Clothing or Equipment:	Synthetic apron and boots		
Work/Hygienic Practices:	Safety shower & Eye wash should be nearby		

Low-VOC Daraclean 236 Cleaner Tested at Los Angeles Times

MAGNAFLUX®

A Division of Illinois Tool Works Inc.

MATERIAL SAFETY DATA SHEET

DARACLEAN® 236

1. IDENTIFICATION

Company: MAGNAFLUX
Address: 3824 West Lake Avenue, Glenview, Illinois 60026
Telephone No.: (847) 657-5200 (Off-Hour Emergency Number - CHEMTREC - 1-800-424-8300)
Product Use: Aqueous alkaline cleaner
Packages: 5 gallon pail, 56 gallon drum
NFPA Rating: Health 2, Flammability 0, Reactivity 0
PIN: None
Revision Date: October 23, 2001

2. INGREDIENTS

Hazardous Ingredients	CAS Number	% by Weight	OSHA PEL*	ACGIH TLV**
Triethanolamine	102-71-6	1-5	Not available	Not available

This product contains no hazardous chemical substances at 1.0% or more listed in 29 CFR 1910 Subpart Z, or ACGIH Threshold Limit Values. Also this product contains no carcinogens at 0.1% or more listed in NTP Annual Report on Carcinogens, IARC Monographs, or 29 CFR 1910 Subpart Z.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Bland, nonflammable, thin liquid which may irritate the skin and eyes.

Signs & Symptoms of Acute Exposure
Inhalation: Irritation may occur if material becomes airborne.
Eyes: Irritation upon direct contact.
Skin: Irritation upon direct contact.
Ingestion: None known.

4. FIRST AID

Skin Contact: Wash off with soap and water. Use soothing lotion.
Eyes: Rinse carefully under upper and lower eyelids using plenty of water.
Inhalation: Remove to fresh air.
Ingestion: If conscious, dilute by giving 2 glasses of water. Call physician or local poison control center immediately.
NOTE: In all severe cases, contact physician immediately. Local telephone operators can furnish number of regional poison control center.

5. FIRE HAZARD

Conditions of flammability: None
Flash point: None to boiling
Flammable limits in air: None
Extinguishing media: Carbon Dioxide, dry chemical, foam. Avoid water if possible. Special fire fighting procedures: None
Hazardous combustion products: Combustion will result in the release of the usual decomposition products including oxides of carbon and nitrogen
Unusual fire hazards: None

6. ACCIDENTAL RELEASE MEASURES

For Small Spills: Wipe up, or absorb with sand or other absorbent material. Collect waste in sealed containers.
For Large Spills: Dike area to prevent spreading. Shovel or pump to drum or salvage tank. Absorb residual material with sand, or other absorbent material. Wash area with soapy water and rinse. Area will be slippery until cleaned.

Dispose of all product wastes and water rinses in accordance with current local, state, and Federal regulations.

7. HANDLING AND STORAGE

-Does not normally become airborne; in operations where it does, if general ventilation or local exhaust is inadequate, persons exposed to mist should wear approved breathing devices.
-Wear neoprene gloves if direct contact likely; wear eye protection.
-Store product at 40-100°F in a well-ventilated area.
-Do not mix with nitrates or nitrite containing compounds (49 FR 24858, 6/14/84).

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

Respiratory protection: None
Ventilation: Mechanical (general) sufficient
Protective gloves: Recommended (rubber)
Eye protection: Recommended
Work hygiene practices: Avoid breathing spray mist

9. **PHYSICAL PROPERTIES**

Inflaming point (auto):	212°F approx	Vapor pressure:	13 mmHg @ 20°C
Percent volatile:	Not established	Vapor density:	None established
Density (sp. gravity):	1.0 approx	Evaporation rate:	1.0 (water = 1.0)
Water solubility:	100%	Appearance:	Colorless to pale yellow slightly hazy liquid
pH of concentrate:	7.5		

10. **STABILITY AND REACTIVITY**

Stability: Stable
Incompatibility: None
Hazardous decomposition products: None
Reactivity: None

11. **TOXICOLOGICAL INFORMATION**

Chronic toxicity: Contains no known or suspected carcinogens listed with OSHA, IARC, NTP, or ACGIH.
Irritation: Not established.
Threat to life cycle: According to available information, the ingredients have not been found to show reproductive toxicity, teratogenicity, mutagenicity, skin sensitization, or synergistic toxic effects with other materials.
WHMIS information (Canada):

12. **ECOLOGICAL INFORMATION**

No data is available. It dissolves into water and is biodegradable. Its low vapor pressure may exempt it from VOC restrictions.

13. **DISPOSAL**

Dispose according to Federal, State and Local laws and 40 CFR.
RCRA: Not a hazardous waste
U.S. EPA Waste Number: None

14. **TRANSPORTATION**

U.S. DOT: 49 CFR 172.101 Hazardous Materials Table
Bulk: Bulk
Proper shipping name: Not regulated
Hazard class or division: None
Identification No: None
Packing Group: None

15. **REGULATORY INFORMATION**

TSCA: All ingredients are listed in TSCA inventory.
CERCLA: Not reportable
SARA TITLE III, Section 312: Contains nothing on this list.
California Proposition 65: Contains nothing on this list.
WHMIS Class (Canada): Not a controlled product.
Note: This MSDS has been prepared to meet WHMIS (Canada) requirements with the exception of using 16 headings.

16. **OTHER INFORMATION**

Revision Statement: New format
Supersedes: April 5, 2001
Prepared by: Garret Simmonds, R&D Manager

Low-VOC ES-219 Cleaner Tested at Los Angeles Times

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Trade Name: 219-ES Ester Emulsion
Generic Name: Water Based Emulsion Cleaner

CAS #: Proprietary Blend

Manufacturer: Siebert, Inc.
Address: 8134 West 47th Street
City: Lyons State: IL Zip: 60534

Emergency phone#: (800) 535-5053
Technical phone#: (708) 442-2010

DOT Hazard Classification: Not Regulated
NFPA Codes: Health - 0 Flammability - 0 Reactivity - 0
HMS Codes: Health - 1 Flammability - 0 Reactivity - 0 Personal Protection - B

II. HAZARDOUS INGREDIENTS

If present, IARC, NTP, and OSHA carcinogens and chemicals subject to the reporting requirements of SARA Title III Section 313 are identified in this section.

Ingredient Name	CAS Number	%wt	TLV	STEL	SARA TITLE III
Fatty esters	Various	20 to 25	None established	None established	No
Surfactants	Various	15 to 30	None established	None established	No
Coco amide	68603-42-9	5 to 15	None established	None established	No

References: 29CFR 1910.1000, ACGIH "Threshold Limit Values for Chemicals in the Workplace", National Toxicology Program Annual Report, International Agency for Research on Cancer Monographs, and 40CFR Part 372. All components of this product are in compliance with TSCA.

III. PHYSICAL DATA

Boiling Point @ 760 mm Hg:	308 - 335°F
Vapor Pressure @ 80°F:	<0.1 mm Hg
Specific Gravity @ 68°F:	0.92
Water Solubility (%):	Soluble
Specific Vapor Density (air=1):	<1.0
% Volatile by Volume:	53.0
% Volatile Organic Compound(s):	<1.0
Appearance:	Clear golden liquid
Odor:	Typical organic odor

IV. FIRE AND EXPLOSION DATA

Flash Point (Method: >300°F (TCC))
Explosive Limits: LEL - N/E UEL - N/E
Extinguishing Media: Water fog, carbon dioxide, or dry chemical.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus when fighting chemical fires.
Unusual Fire and Explosion Hazards: Fine sprays/mists may be combustible at temperatures below normal flash point.
Rags soaked with material, stored for a long period while mixed with strong alkali or acidic materials, may smolder, then smoke, and may even ignite.

V. HEALTH HAZARD DATA

Eyes - May cause temporary irritation, redness, tearing, blurred vision. Contact lenses must not be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

19-ES Ester Emulsion

Skin - Prolonged or repeated contact may cause irritation.

Breathing - Excessive inhalation of vapors may cause nasal and respiratory irritation, central nervous system effects including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

Swallowing - Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

First Aid/Emergency Procedures

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet and get medical attention.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use.

Eyes: Flush with copious amounts of water. Get medical attention.

Ingestion: Do not induce vomiting. If large quantity is swallowed, give lukewarm water (pint). NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Get medical attention immediately. Risk of damage to lungs exceeds poisoning risk.

Primary Entry Route(s): Inhalation, skin contact.

Chronic Health Effects: Chronic overexposure may aggravate existing skin, eye and lung conditions.

VI. REACTIVITY DATA

Stability: Stable.

Hazardous Polymerization: Cannot occur.

Incompatibilities: Avoid contact with strong oxidizing materials, strong alkalis, strong mineral acids.

Hazardous Decomposition Products: Carbon mono/di oxides.

Conditions to Avoid: None

VII. SPILL OR LEAK PROCEDURES

Procedures for Spill/Leak:

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks, etc.).

Small Spill - Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and transfer to a recovery drum.

Large Spill - Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into recovery drums. Prevent run-off to sewers, streams or other bodies of water. Notify proper authorities, as required, that a spill has occurred.

Waste Management:

Landfill solids at permitted sites. Use registered transporters. Burn concentrated liquids at permitted sites. Avoid flammouts. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade. Avoid overloading/poisoning plant biomass. Assure effluent complies with applicable regulations.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection:

If workplace exposure limit(s) of product is exceeded, a NIOSH/MSHA approved air supplied respirator is advised in the absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

Ventilation: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain minimum exposure.

Eye Protection: Chemical Splash Proof Goggles and full face shield are advised for operations where eye or face contact can occur.

Gloves: Wear impervious gloves.

Other Protective Equipment: To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

IX. SPECIAL PRECAUTIONS

Special Handling/Storage:

To avoid skin contact and ingestion, wash hands and face well before eating or smoking. Do not permit food in work area. Avoid breathing mists if generated. Store at room temperature. Reseal container when not in use. Do not store near acids, bases or flammable liquids. Containers of this material should be rinsed when emptied, since emptied containers retain product residues (vapor, liquid, and/or solid). All hazard precautions given in this data sheet must be observed.

As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

Date revised: 03/22/2002

jpm

**Low-VOC Mirachem Pressroom Cleaner Tested At Los Angeles Times and Used at
the San Bernardino Sun**



A division of



Material Safety Data Sheet

MIRACHEM Pressroom Cleaner

(Formulation No. 2501)

Section I - General

Manufacturer Name:	The Mirachem Corporation P.O. Box 27608 Tempe, Arizona 85285-7608	Date Prepared:	7/3/96
		Revision Date:	
Emergency Phone:	1-(800) 847-3527		

Section II - Hazardous Ingredients/Identity Information

Hazardous Component (CAS #)	OSHA PEL	ACGIH TLV	Other Limits	% (Optional)
None				

N.E. = None Established

Section III - Physical/Chemical Characteristics

Boiling Point:	>210°F	Specific Gravity (H ₂ O = 1):	0.9957
Vapor Pressure (mm Hg.): @ 20°C:	Composite 0.006	pH:	8.7-9.5
Vapor Density (AIR =1):	> 1	Evaporation Rate (Butyl Acetate=1):	> 1
Solubility in Water:	Complete	Melting Point:	N/A
Appearance and Odor:	Clear liquid with a mild citrus odor		
N/A = Not Applicable		N.E. = Not Established	

Section IV - Fire and Explosion Hazard

Flash Point (Method Used):	>212°F (PMCC ASTM D93)	Explosive Limits:	N/A
Extinguishing Media:	N/A		
Special Fire Fighting Procedures:	N/A	Unusual Fire Fighting and Explosion Hazards:	N/A

Section V - Reactivity

Stability:	Unstable Stable	X	Incompatibility (Materials to Avoid):	Strong Acids and Alkalies. demulsify product.
Hazardous Decomposition or By-products:	Thermal decomposition may produce CO ₂			
Hazardous Polymerization:	May Occur		Will Not Occur X	

Section VI - Health Hazard Data

Eye Contact:	May cause mild temporary irritation.
Skin Contact:	Prolonged or repeated exposure may cause mild irritation.
Inhalation:	No adverse effects expected.
Ingestion:	No adverse health effects are anticipated to occur as a result of acute ingestion. Chronic effects are not known.
Carcinogenicity:	None of the components in this material are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.
Signs/Symptoms of Overexposure:	Prolonged contact may cause mild irritation or dryness to sensitive skin.
Medical Conditions Generally Aggravated by Exposure:	None known.

Section VII - Emergency and First Aid Procedures

Eyes:	Immediately flush with clean water. Consult physician if necessary.
Skin:	Rinse with water.
Ingestion:	If swallowed, treat symptomatically and supportively. Do not induce vomiting. If victim conscious and alert, give two glasses of water or milk to drink. If vomiting occurs, keep head below hips to prevent aspiration. Contact Physician.
Inhalation:	No adverse effects anticipated.

Section VIII - Precautions for Safe Handling and Use

In Case of Spill:	Flush with water into containing area.
Waste Disposal:	Flush to sewer where applicable within Federal, State or Local disposal requirements.
Handling & Storage Precautions:	Wear protective goggles or face shield if splashing or spraying liquid. Protect from freezing.
Other Precautions:	Keep container tightly closed. Keep out of reach of children.

Section IX - Control Measures

Respiratory Protection:	No respiratory protection is necessary.
Ventilation:	Good general ventilation is sufficient.
Protective Clothing:	When prolonged skin contact is expected, wear protective gloves.
Eye Protection:	Wear safety glasses.
Work/Hygienic Practices:	Use good personal hygiene practices, wash hands before eating, drinking, smoking, or using toilet facilities.

**Low-VOC Soy Gold 1000 Cleaner Used for
Pipe Roller Cleaning at the San Bernardino Sun**



M A T E R I A L S A F E T Y D A T A S H E E T

EMERGENCY PHONE: 913-599-6911

CHEMTREC: 800-424

SECTION I-IDENTIFICATION

PRODUCT: SOYGOLD® 1000
CAS No.: 67784-80-9
CHEMICAL: Fatty acid methyl esters
SYNONYMS: Methyl esters of soybean oil

SECTION II-INGREDIENTS AND HAZARD CLASSIFICATION

TYPICAL COMPOSITION

Alkyl C₁₂-C₁₈-Methyl Esters

This product contains no hazardous material.

SARA HAZARD: TITLE III SECTION 313-Not listed FIRE-(Section 311/312) None noted

SECTION III-HEALTH INFORMATION

EFFECTS OF OVEREXPOSURE

INHALATION: No known problems
INGESTION: LD50:>50ml/kg (albino rats)(similar products)
EYE CONTACT: Not classified as eye irritants
SKIN CONTACT: Not classified as a skin irritant or corrosive material

SECTION IV-OCCUPATIONAL EXPOSURE LIMITS

PEL: NO OSHA PEL

TLV: NO ACGIH TLV

SECTION V-EMERGENCY FIRST AID PROCEDURE

FOLLOW STANDARD FIRST AID PROCEDURES:

SWALLOWING: Call physician or poison control center.
SKIN CONTACT: Wash affected area.
EYE CONTACT: Flush eyes with cool water for at least 15 minutes. Do not let victim rub eyes.
INHALATION: Immediately remove victim to fresh air. Get medical attention immediately.

SECTION VI-PHYSICAL DATA

BOILING POINT: Over 600° F (315° C) at 760 mm Hg pressure
MELTING POINT: -1° C
VAPOR PRESSURE: Less than 5 mm Hg at 72° F
SPECIFIC GRAVITY: 0.87 at 25° C
SOLUBILITY IN WATER: Negligible at room temperature
APPEARANCE AND COLOR: Light yellow and liquid at room temperature
ODOR: Light vegetable oil odor

SECTION VII-FIRE AND EXPLOSION HAZARDS

FLASH POINT & METHOD USED: 425° F (218° C)(PMCC)
FLAMMABLE LIMITS: Not applicable
NFPA RATING: No NFPA rating

HMIS RATING: HEALTH: 0 FIRE: 1 REACTIVITY: 0

SPECIAL FIRE FIGHTING PROCEDURES & PRECAUTIONS: Treat as oil fire.
Use water spray, dry chemical, foam or carbon dioxide.

UNUSUAL FIRE & EXPLOSION HAZARDS:

Rags soaked with any solvent present a fire hazard and should always be stored in UL listed or Factory Mutual approved, covered containers. Improperly stored rags can create conditions that lead to oxidation. Oxidation, under certain conditions can lead to spontaneous combustion. This product contains antioxidants to retard oxidation.

SECTION VIII-REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: None likely
MATERIALS TO AVOID: Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS: CO₂, CO
CONDITIONS TO AVOID: None known

SECTION IX-EMPLOYEE PROTECTION

CONTROL MEASURES: Adequate ventilation
RESPIRATORY PROTECTION: None required
PROTECTIVE CLOTHING: No need anticipated
EYE PROTECTION: None required

SECTION X-ENVIRONMENTAL PROTECTION

ENVIRONMENTAL PRECAUTIONS: Avoid uncontrolled releases of this material to environment.

SPILL OR LEAK PRECAUTIONS: Contain spilled material. Transfer to secure containers. Where necessary, collect using absorbent media.

WASTE DISPOSAL: Dispose of according to federal, state and/or local requirements.

SECTION XI-REGULATORY CONTROLS

DOT CLASSIFICATION: Class 55
DOT PROPER SHIPPING NAME: Cleaning Compound, N.O.S.
OTHER REGULATORY REQUIREMENTS: Listed in TSCA inventory

SECTION XII-PRECAUTIONS: HANDLING, STORAGE AND USAGE

No special precautions necessary.

SECTION XIII-DATE AND SIGNATURE

~~This information relates only to the specific material designated and may not be valid for such material~~
used in combination with any other materials or in any other process. The stated MSDS is reliable to the best of the company's knowledge and believed accurate as of the date indicated. However, no representation, warranty or guarantee of any kind, expressed or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

AC ENVIRONMENTAL PRODUCTS, L.L.C.
9804 PFLUMM
LENEXA, KS 66215

SIGNATURE: William A. Ayres

PREPARED BY: WILLIAM A. AYRES REVISION DATE: 7-1-98

**Low-VOC Soy Gold 2000 Cleaner Tested at J. S. Paluch, PIP Printing, City of Santa
Monica print Shop, Presslink, Vertis and R.R. Donnelley & Sons**

SOYGOLD

2000
S O L V E N T

M A T E R I A L S A F E T Y D A T A S H E E T

EMERGENCY PHONE: 913-599-6911

CHEMTREC: 800-424-9300

SECTION I-IDENTIFICATION

PRODUCT: SOYGOLD[®] 2000
CAS No.: 67784-80-9
CHEMICAL: Fatty acid methyl esters
SYNONYMS: Methyl esters of soybean oil

SECTION II-INGREDIENTS AND HAZARD CLASSIFICATION

TYPICAL COMPOSITION	CAS	%
Alkyl C ₁₀ -C ₁₈ -Methyl Esters	67784-80-9	97-99
Surfactant	9016-45-9	1-3

SARA HAZARD: TITLE III SECTION 313: Not listed FIRE (Section 311/312): None noted

SECTION III-HEALTH INFORMATION

EFFECTS OF OVEREXPOSURE

INHALATION: No known problems
INGESTION: LD₅₀>>50ml/kg (albino rats)(similar products)
EYE CONTACT: Not classified as eye irritants
SKIN CONTACT: Not classified as a skin irritant or corrosive material

SECTION IV-OCCUPATIONAL EXPOSURE LIMITS

PEL: NO OSHA PEL TLV: NO ACGIH TLV

SECTION V-EMERGENCY FIRST AID PROCEDURE

FOLLOW STANDARD FIRST AID PROCEDURES

SWALLOWING: Call physician or poison control center.
SKIN CONTACT: Wash affected area.
EYE CONTACT: Flush eyes with cool water for at least 15 minutes. Do not let victim rub eyes.
INHALATION: Immediately remove victim to fresh air. Get medical attention immediately.

SECTION VI-PHYSICAL DATA

BOILING POINT: Over 600° F (315° C) at 760 mm Hg pressure
MELTING POINT: -1° C
VAPOR PRESSURE: 0.882 mm Hg at 25° C
SPECIFIC GRAVITY: 0.882 g/mL at 25° C
DIELECTRIC STRENGTH: >56.9
SOLUBILITY IN WATER: Negligible at room temperature
APPEARANCE AND COLOR: Light yellow to clear and liquid at room temperature
ODOR: Light vegetable oil odor

SECTION VII-FIRE AND EXPLOSION HAZARDS

FLASH POINT & METHOD USED: 425° F (218° C)(PMCC)
FLAMMABLE LIMITS: Not applicable
NFPA RATING: No NFPA rating
HMS RATING: HEALTH: 0 FIRE: 1 REACTIVITY: 0

AEP-02003

SOYGOLD® 2000 (CONTINUED)

SPECIAL FIRE FIGHTING PROCEDURES & PRECAUTIONS

Treat as oil fire. Use water spray, dry chemical, foam or carbon dioxide.

UNUSUAL FIRE & EXPLOSION HAZARDS

Rags soaked with any solvent present a fire hazard and should always be stored in UL listed or Factory Mutual approved, covered containers. Improperly stored rags can create conditions that lead to oxidation. Oxidation, under certain conditions can lead to spontaneous combustion. This product contains antioxidants to retard oxidation.

SECTION VIII-REACTIVITY

STABILITY:	Stable
HAZARDOUS POLYMERIZATION:	None likely
MATERIALS TO AVOID:	Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS:	CO ₂ , CO
CONDITIONS TO AVOID:	None known

SECTION IX-EMPLOYEE PROTECTION

CONTROL MEASURES:	Adequate ventilation
RESPIRATORY PROTECTION:	None required
PROTECTIVE CLOTHING:	No need anticipated
EYE PROTECTION:	None required

SECTION X-ENVIRONMENTAL PROTECTION

ENVIRONMENTAL PRECAUTIONS:	Avoid uncontrolled releases of this material into environment.
SPILL OR LEAK PRECAUTIONS:	Contain spilled material. Transfer to secure containers. Where necessary, collect using absorbent media.
WASTE DISPOSAL:	Dispose of according to federal, state and/or local requirements.

SECTION XI-REGULATORY CONTROLS

DOT CLASSIFICATION:	Class 55
DOT PROPER SHIPPING NAME:	Cleaning Compound, N.O.S.
OTHER REGULATORY REQUIREMENTS:	Listed in TSCA inventory

SECTION XII-PRECAUTIONS: HANDLING, STORAGE AND USAGE

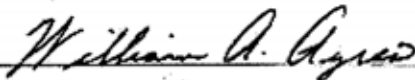
No special precautions necessary.

SECTION XIII-DATE AND SIGNATURE

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. The stated MSDS is reliable to the best of the company's knowledge and believed accurate as of the date indicated. However, no representation, warranty or guarantee of any kind, expressed or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

AG ENVIRONMENTAL PRODUCTS, L.L.C.
9804 PFLUMM
LENEXA, KS 66215

SIGNATURE: _____



PREPARED BY: WILLIAM A. AYRES

REVISION DATE: 5-01-01

**Low-VOC Acetone Ingredient Tested at Nelson Nameplate, SCAQMD Print Shop,
The Castle Press, Print 2000 Graphics, Western Metal Decorating, The Dot Printer,
Lithographix, The Printery, Tedco, Oberthur Card Systems and Huhtamaki**

MSDS Material Safety Data Sheet

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08866



24 Hour Emergency Telephone: 800-459-6111
CIVILIAN: 1-800-424-6000

National Registered in Canada
C/AMTIC: 416-896-6000

Outside U.S. and Canada
Chemical: 704-827-3837

NOTE: CHEMTREC, CANNITIC and National
Response Center emergency numbers to be
used only in the event of chemical emergencies
involving a spill, leak, fire, exposure or accident
involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-882-3537) for assistance.

ACETONE

MSDS Number: A0446 — Effective Date: 04/10/01

1. Product Identification

Synonyms: Dimethylketone; 2-propanone; dimethylketal

CAS No.: 67-64-1

Molecular Weight: 58.08

Chemical Formula: (CH₃)₂CO

Product Codes:

J.T. Baker: 5356, 5580, 5805, 9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9015, 9036, 9125, 9254, 9271,

A134, V655

Mallinckrodt: 0018, 2432, 2435, 2437, 2438, 2440, 2443, 2445, 2850, H451, H580, H981

2. Composition/Information on Ingredients

Ingredient	CAS No.	Percent	Hazardous
Acetone	67-64-1	99 - 100%	Yes

3. Hazards Identification

Emergency Overview

**DANGER: EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE.
HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY
TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.**

J.T. Baker SAF-T-DATA^(SM) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight

Flammability Rating: 4 - Extreme (Flammable)
Reactivity Rating: 2 - Moderate
Contact Rating: 1 - Slight
Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER
Storage Color Code: Red (Flammable)

Potential Health Effects

Inhalation:

Inhalation of vapors irritates the respiratory tract. May cause coughing, dizziness, dullness, and headache. Higher concentrations can produce central nervous system depression, narcosis, and unconsciousness.

Ingestion:

Swallowing small amounts is not likely to produce harmful effects. Ingestion of larger amounts may produce abdominal pain, nausea and vomiting. Aspiration into lungs can produce severe lung damage and is a medical emergency. Other symptoms are expected to parallel inhalation.

Skin Contact:

Irritating due to defatting action on skin. Causes redness, pain, drying and cracking of the skin.

Eye Contact:

Vapors are irritating to the eyes. Splashes may cause severe irritation, with stinging, tearing, redness and pain.

Chronic Exposure:

Prolonged or repeated skin contact may produce severe irritation or dermatitis.

Aggravation of Pre-existing Conditions:

Use of alcoholic beverages enhances toxic effects. Exposure may increase the toxic potential of chlorinated hydrocarbons, such as chloroform, trichloroethane.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.

5. Fire Fighting Measures

Fire:

Flash point: -20C (-4F) CC

Autoignition temperature: 465C (869F)

Flammable limits in air % by volume:

lcl: 2.5; ucl: 12.8

Extremely Flammable Liquid and Vapor! Vapor may cause flash fire.

Explosion:

Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Vapors can flow along surfaces to distant ignition source and flash back. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated. This material may produce a floating fire hazard. Sensitive to static discharge.

Fire Extinguishing Media:

Dry chemical, alcohol foam or carbon dioxide. Water may be ineffective. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

J. T. Baker SOLUSORB(R) solvent adsorbent is recommended for spills of this product.

7. Handling and Storage

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

Acetone:

-OSHA Permissible Exposure Limit (PEL):
1000 ppm (TWA)

-ACGIH Threshold Limit Value (TLV):

500 ppm (TWA), 750 ppm (STEL) A4 - not classifiable as a human carcinogen

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded, a half-face organic vapor respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest.

A full-face piece organic vapor respirator may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin

contact.

Eye Protection:

(Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Clear, colorless, volatile liquid.

Odor:

Fragrant, mint-like

Solubility:

Miscible in all proportions in water.

Specific Gravity:

0.79 @ 20C/4C

pH:

No information found.

% Volatiles by volume @ 21C (70F):

100

Boiling Point:

56.5C (133F) @ 760 mm Hg

Melting Point:

-95C (-139F)

Vapor Density (Air=1):

2.0

Vapor Pressure (mm Hg):

400 @ 39.5C (104F)

Evaporation Rate (BuAc=1):

ca. 7.7

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Concentrated nitric and sulfuric acid mixtures, oxidizing materials, chloroform, alkalis, chlorine compounds, acids, potassium t-butoxide.

Conditions to Avoid:

Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

Oral rat LD50: 5800 mg/kg; Inhalation rat LC50: 50,100mg/m3; Irritation eye rabbit, Standard Draize, 20 mg severe; investigated as a tumorigen, mutagen, reproductive effector.

-----\Cancer Lists\-----

Ingredient	---NTF Carcinogen---		IARC Category
	Known	Anticipated	
Acetone (67-64-1)	No	No	None

12. Ecological Information

Environmental Fate:

When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into water, this material is expected to readily biodegrade. When released to water, this material is expected to quickly evaporate. This material has a log octanol-water partition coefficient of less than 3.0. This material is not expected to significantly bioaccumulate. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be moderately degraded by photolysis. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition.

Environmental Toxicity:

This material is not expected to be toxic to aquatic life. The LC50/96-hour values for fish are over 100 mg/l.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Domestic (Land, D.O.T.)

Proper Shipping Name: ACETONE
 Hazard Class: 3
 UN/NA: UN1090
 Packing Group: II
 Information reported for product/size: 350LB

International (Water, I.M.O.)

Proper Shipping Name: ACETONE
 Hazard Class: 3
 UN/NA: UN1090
 Packing Group: II
 Information reported for product/size: 350LB

15. Regulatory Information

Ingredient	-----\Chemical Inventory Status - Part 1\-----			
	TSCA	EC	Japan	Australia

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	OSL	MSL	Phil.
Acetone (67-64-1)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-SARA 313-	
	HQ	TPQ	List	Chemical Catg.
Acetone (67-64-1)	No	No	Yes	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	B(d)
Acetone (67-64-1)	5000	0002	No

Chemical Weapons Convention: No TSCA 12(b): Yes CDTA: Yes
SARA 311/312: Acute: Yes Chronic: No Fire: Yes Pressure: No
Reactivity: No (Pure / Liquid)

Australian Hazchem Code: 2(Y)E
Poison Schedule: No information found.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS consists all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 1 Flammability: 3 Reactivity: 0

Label Hazard Warning:

DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.

Label Precautions:

Keep away from heat, sparks and flame.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.
Avoid breathing vapor.
Avoid contact with eyes, skin and clothing.

Label First Aid:

Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately. 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 or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

Product Use:

Laboratory Reagent.
Revision Information:
No changes.

Disclaimer:

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Prepared by: Environmental Health & Safety
Phone Number: (314) 654-1600 (U.S.A.)

**Low-VOC Acetone/Mineral Spirits Blanket Cleaner Used at Nelson Nameplate and
Metering Roller Cleaner Tested at Several Facilities**

MATERIAL SAFETY DATA SHEET

RHO-CHEM CORPORATION

(A Fully Owned Subsidiary of Philip Services Corporation)

425 Isis Avenue, Inglewood, California - 90301

Tel.: (323)776-6233, Fax: (310)645-6379

Product : Rhosolv-7248, Revision- Initial Release/10-21-2004

Page No. 1 of 9

1. COMPANY AND MATERIAL IDENTIFICATION :

Product Name/Number : Rho-Solv 7248
Synonyms : N. A.
Chemical Family : Flammable Solvent Blend
Stock Number : Technical Grade -7248
Electronic/Semiconductor Grade - N. A.
Reconstituted Grade - N.A.
ACS Reagent Grade - N.A.

2. COMPOSITION OF THE MATERIAL: MIXTURE

<u>Chemical Name</u>	<u>CAS No.</u>	<u>% Concentration</u>
Acetone	67-64-1	70 - 90%
Naphtha (light aliphatic)	64742-89-8	< 10%
Naphtha (light aromatic)	64742-95-6	< 10%

3. HAZARDS IDENTIFICATION :

EXTREMELY FLAMMABLE LIQUID & VAPOR. MAY CAUSE FLASH FIRE.

Inhalation:

High concentration of vapors will be irritating to the respiratory tract and may cause dizziness, headache, and dizziness Central Nervous System effects & possibly death.

Ingestion:

Ingestion of larger amounts may produce abdominal pain, nausea and vomiting. Aspiration into lungs can cause lung damage.

Skin Contact:

~~May cause some irritation, drying, redness or cracking to skin~~

Eye Contact:

Vapors may be irritating to eyes. Splashing may cause redness and pain to eyes.

Symptoms & Signs to Exposure:

Basically, same symptoms and signs will occur, as given above.

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Medical Conditions Aggravated:

Pre-existing medical conditions of the Respiratory System, Skin dermatitis and Eyes may be aggravated by further exposure to this material.

4. **FIRST AID :**

Inhalation:

Remove the person to fresh air. If no improvement noticed, then transport to the nearest medical care facility for further treatment.

Ingestion:

If swallowed, do not induce vomiting. transport to the nearest medical care facility for further treatment.

Skin Contact:

Remove contaminated clothing. Flush exposed area with water followed by washing with soap.

Eye Contact:

Flush eyes with water with eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling persist, transport to the nearest medical care facility for further treatment.

Advice to Physician:

Causes CNS depression. Prolonged or repeated exposure may result in dermatitis.

5. **FIRE FIGHTING MEASURES :**

Clear the area of all non-emergency, un-protected personnel.

<u>Ingredient</u>	<u>Flash Point</u>	<u>U.F.L.</u>	<u>L.F.L.</u>	<u>Auto Ignition Temp.</u>
Acetone	-20° C - CC	12.8	2.5	465° C (869° F)
Naphtha (aliphatic)	14-18° C-CC	0.7	0.9	Not available
Naphtha (aromatic)	40-47° C -CC	0.1	0.6	Not available

Specific Hazards:

~~Carbon Monoxide may be evolved in case of incomplete combustion. Will float on the surface water and can be re-ignited. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup, which could result in container rupture. Containers exposed to direct flame should be cooled with large quantities of water as needed to prevent weakening of container structure or rupture.~~

Extinguishing Media:

Use water, foam dry chemical or Carbon dioxide, sand or earth may be used in case of small fires. The extinguishing water must be collected separately and disposed of as a waste. At no instance, this contaminated water will be discharged to the environment or into sewage, city or

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municipal waters. Material can accumulate static discharge. Empty containers still retain residue, a liquid & or vapor mixture.

Protective Equipment:

Wear full protective clothing and Self contained breathing apparatus for large spill/fire.

6. **ACCIDENTAL RELEASE MEASURES**

Observe all relevant local, State, Federal and International regulations as applicable.

Protective measures:

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment, please refer to section 8 and for disposal of spilled material refer to section 13 of this MSDS. Shut off leaks, if no risk is involved. Eliminate all possible ignition sources in surrounding area. Use appropriate containment methods to avoid further contamination to environment and to neighboring areas. Avoid spreading or entering the spilled material into the drains, ditches or rivers by using sand, earth or other appropriate barriers. Attempt to Disperse the vapors to divert its flow to a safe location, by using fog sprays, for example. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding all equipment. Monitor area with combustible gas indicator. A leaking drum or container can be rolled or made up side down in the direction opposite to the leaking spot

Clean Up Methods:

For small liquid spills (< 1 drum of 55 gal), transfer to a labeled, sealable container by mechanical means for safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely.

For large liquid spills (> 1 drum of 55 gal), transfer by mechanical means such as vacuum truck to a salvage tank for safe disposal. Retain as a contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

Additional Information:

Notify appropriate authorities if there is a risk involved to the general public or to the environment or to the neighborhood due to the spill or release of this material. Vapor may form ~~an explosive mixture with air. Please report to the National Response Center @ (800)424-8802~~ if the spilled quantity exceeds the reportable quantity. (Refer to chapter 15 of this MSDS. Required under CERCLA (Comprehensive Environment Response, Compensation & Liability Act).

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7. HANDLING AND STORAGE

General Precautions :

Avoid breathing of or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. Use appropriate P.P.E. per section 8 of this MSDS.

Handling:

Handle and open the container with CARE in well ventilated area. Remove ignition sources. Avoid sparks. Do not create friction. Keep container closed, to avoid emissions and inhalation. Avoid any force opening, creating friction. Avoid contact with skin, eyes and clothing. Ensure electrical continuity by bonding and grounding all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge ($<= 1$ m./sec until fill pipe is submerged to twice its diameter, then $<= 7$ m/sec.) Avoid splash filling. Do not use compressed air for filling, discharging or handling operations. The vapor is heavier than air spreads along the ground and distant ignition is possible. Extinguish any naked flames. Do not smoke. Ventilate workplace in such a way that the Occupational Exposure Limit (OEL) is not exceeded. Do not empty into drains. Avoid handling above its flash point, otherwise the product will form flammable/explosive vapor-air mixtures.

Storage:

Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. Store at ambient temperature. Keep away from aerosols, oxidizers, corrosives.

Product Transfer:

Keep containers closed when not in use. Do not use compressed air for filling. Discharging or handling.

Recommended Materials:

For containers or container linings, use mild steel or Stainless steel. For container paints, use epoxy paint, zinc silicate paint.

Unsuitable Materials:

Avoid prolonged contact with natural, butyl or nitrile rubbers.

~~**Container Recommendation:**~~

Emptied containers may still contain explosive vapors. Do Not cut, drill grind or perform similar operations on or near containers Do not re-use empty containers without commercial cleaning or reconditioning.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Occupational Exposure Limits**

Following table may be referred in absence of occupational standards for this material.

Material	Source	Type	PPM	mg/m ³
Acetone	OSHA	TWA	1000	---
	Cal/OSHA	TWA	750	1780
	Cal/OSHA	STEL	1000	2400
	ACGIH	TWA	500	N.A.
	ACGIH	STEL	750	N.A.
Naphtha-aliphatic	OSHA	TWA	300	1,350
	Cal/OSHA	TWA	400	1,800
	ACGIH	TWA	300	N.A.
Naphtha-aromatic	OSHA	TWA	100	400
	Cal/OSHA	TWA	100	400
	ACGIH	TWA	400	N.A.

General Information :

Wash hands before eating, drinking, smoking and using toilet.

Exposure Control:

The levels of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local environment. Ensure adequate ventilation to control airborne concentration, below the exposure guidelines/limits. Eye washes and showers must be used in case of an emergency.

Personal Protective Equipment:

Use Personal Protective Equipment (P.P.E.) that are NIOSH approved and/or recommended per National Standards.

Respiratory Protection:

~~If an engineering control fail to maintain airborne concentrations to a level which is safe to protect workers' health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Also check with the Respiratory Protective Equipment suppliers and refer to the OSHA Respiratory Standard 1910.134 for detailed information. When air purifying respirator is required, select appropriate respirator and filters suitable for organic gases and vapors. Where air purifying respirators are un-suitable, for example airborne concentration is high, or oxygen is deficient, confined space etc., use appropriate positive pressure, breathing apparatus. For regular handling, full face respirator With organic vapor cartridges is recommended in order to protect the face from splashes.~~

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Hand Protection:

Nitrile rubber gloves give good chemical resistance and can be used for regular use. In case of direct incidental contact, splash, clean up etc., PVC or Neoprene rubber gloves should be used.

Eye Protection:

Chemical Splash goggles (Chemical mono-goggles) should be used

Protective Clothing:

Use chemical resistant clothing, chemical resistant shoes or boots.

Environmental Exposure Controls:

Follow and comply with the local, state and federal guidelines for V.O.C. emission control limits, and for the discharge of exhaust air containing vapors of this material.

9. **PHYSICAL AND CHEMICAL PROPERTIES of Acetone, being a major component in this mixture.**

Appearance	:	Colorless volatile liquid
Odor	:	Distinct fragrant odor
Boiling point	:	56.5° C (133° F) @ 760 mm Hg
Vapor Pressure	:	400 @ 39.5°C (104°F)
Specific Gravity	:	0.79 @ 20°C
Water Solubility	:	Miscible in water
Vapor density (air =1)	:	2.0 (Air =1)
Volatile Organic Compound	:	100 %

10. **STABILITY AND REACTIVITY**

Stability:

Stable under normal conditions of use.

Conditions to Avoid:

~~Avoid heat, sparks, open flames and other ignition sources.~~

Materials to Avoid:

Strong Oxidizing agents, Conc. Nitric or Sulfuric acid, halogenated compounds

Hazardous Decomposition Products:

Will not occur.

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11. TOXICOLOGICAL INFORMATION

Basis of Assessment:

The information given herein is based on similar products, and or compounds.

Acetone:

Oral Toxicity: LD50: 5800 mg/kg , rat

Inhalation Toxicity: LC50 : 5, 100 mg/m³

Carcinogenicity: Not classified as a human carcinogen by ACGIH or IARC.

Naphtha solvents:

Oral Toxicity: LD50: >2000 mg/kg , rat

Inhalation Toxicity: LC50 : > 5, 000 p.p.m. / 1hour

Carcinogenicity: Not classified as a human carcinogen by ACGIH or IARC.

12. ECOLOGICAL INFORMATION

Acetone: CAS # 67-64-1

Acetone is not expected to be toxic to aquatic life.

Environmental Toxicity: Less toxic; LC50/96 - hour - > 100 mg/l

Mobility: Will quickly evaporate from water, will evaporate if released to soil.

Bioaccumulation: Does not bio-accumulate significantly.

Persistence/degradability: Moderately bio-degradable, by reaction with photo-chemically produced hydroxyl radicals.

~~**Naphtha (Aromatic) CAS # 64742-95-6**~~

Fish, Algae & Aquatic Invertebrates: 1 < LC/BC/IC50 <= 10 mg/l

Mobility: Low mobility. Absorbs to soil, floats on water

Persistence/degradability: Expected to be readily biodegradable.

Bio-accumulation: Has the potential to bioaccumulate

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13. DISPOSAL METHODS

Material Disposal:

Recover or recycle if possible. It is the responsibility of a waste generator to determine the extent of hazard, and physical properties of the material generated. Additionally, the generator of the waste of this material must determine its waste classification and disposal methods in compliance with local, state and federal or other regulations.

Container Disposal:

Drain the container thoroughly, and then vent it in a safe place away from sparks, and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld un-cleaned containers. Send the waste drum to the drum re-coverer or reclaimer.

Local Regulatory Compliance:

The disposal should be in compliance with applicable local, regional, state and national laws and regulations.

14. TRANSPORT INFORMATION

U. S. Department of Transportation Classification (49 CFR)

Identification number:	UN 1993
Proper shipping name:	Flammable liquid, n. o. s. (Acetone/Naphtha mixture)
Class/Division:	3
Packing Group:	II
Contains OIL	
Emergency Response Guide No.:	128

15. REGULATORY INFORMATION

Federal Regulatory Status:

Notification:

~~TSCA~~ Listed

SARA TITLE III, Sections 311, 312

Classified as Fire hazard.

SARA Toxic Release Inventory (TRI) 313

Naphtha (aromatic) in contains following chemicals:

1, 2, 4 Trimethyl benzene : < 5%

Cumene: < 0.5% and Xylene: < 0.2%

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State Regulatory Information:

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

Not listed.

16. **OTHER INFORMATION**

HMIS Rating: H=1, F=3, R=0
(Health, Flammability & Reactivity)

NFPA Rating : H=1, R=3, R=0
(Health, Flammability & Reactivity)

MSDS Revision level: New - Initial Release

Uses and Restrictions: Industrial solvent

MSDS Distribution: The copy of this MSDS should be available to every one who may handle this material.

Disclaimer:

The content and format of this MSDS is in accordance with the OSHA Hazard Communication Standard, 29 CFR 1910.1200 and the information contained herein is to the best of our knowledge for its original form in which it is supplied and is intended as guidelines for the purpose of handler's and environmental safety. No warranty or guarantee is expressed or implied regarding the accuracy of this data or of the resulting product, using this material.

Low-VOC Cleaner Used by SCAQMD Print Shop

**MATERIAL SAFETY DATA SHEET
RHO-CHEM CORPORATION**

(A Fully Owned Subsidiary of Philip Services Corporation)
425 Isis Avenue, Inglewood, California – 90301
Tel.: (323)776-6233, Fax: (310)645-6379

Product : **Rho-Wash 100**, Revision- Initial Release/7-19-2005

Page No. 1 of 9

1. COMPANY AND MATERIAL IDENTIFICATION :

Product Name/Number : Rho-Wash 100
Synonyms : N. A.
Chemical Family : Flammable Solvent Blend
Stock Number : T011

2. COMPOSITION OF THE MATERIAL: MIXTURE

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Wt.% Concentration</u>
Acetone	67-64-1	50 - 75
Mineral Spirits (comparable to Stoddard solvent)	64742-47-8	10 - 15
1,2,4-Trimethylbenzene	95-63-6	1 - 5
Non-hazardous substances		25 - 30

3. HAZARDS IDENTIFICATION :

FLAMMABLE LIQUID & VAPOR. MAY CAUSE FLASH FIRE.

Inhalation:

High concentration of vapors will be irritating to the respiratory tract and may cause drowsiness, headache, dizziness and Central Nervous System effects.

Ingestion:

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. If large amounts may be harmful if accidentally swallowed. May result into lung inflammation.

Skin Contact:

May cause some irritation to skin. Exposure to large amounts may result into redness, burning, drying and cracking. Not harmful if handled safely.

Eye Contact:

Vapors may be irritating to eyes. May cause stinging, tearing, redness and swelling of eyes.

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Symptoms & Signs to Exposure:

Basically, same symptoms and signs will occur, as given above.

Medical Conditions Aggravated:

Pre-existing medical conditions of the Respiratory System, Skin dermatitis and Eyes may be aggravated by further exposure to this material.

4. FIRST AID :

Inhalation:

Remove the person to fresh air. If no improvement noticed, then transport to the nearest medical care facility for further treatment.

Ingestion:

If swallowed, do not induce vomiting, take the affected person to the nearest medical care facility for further treatment.

Skin Contact:

Remove contaminated clothing. Flush exposed area with water followed by washing with soap.

Eye Contact:

Flush eyes with water with eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling persist, transport to the nearest medical care facility for further treatment.

Advice to Physician:

Causes CNS depression. Prolonged or repeated exposure may result in dermatitis.

5. FIRE FIGHTING MEASURES :

Clear the area of all non-emergency, un-protected personnel.

Flash Point of the mixture: < 100° F - TCC

Following properties are of the main ingredient (Acetone) in the mixture:

Upper Flammable Limit: 2.6 % (V)

Lower Flammable Limit: 12.8 % (V)

Auto Ignition Temperature: 465°C

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Specific Hazards:

Carbon Monoxide may be evolved in case of incomplete combustion. Will float on the surface water and can be re-ignited. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup, which could result in container rupture. Containers exposed to direct flame should be cooled with large quantities of water as needed to prevent weakening of container structure or rupture. Keep away from all the ignition and electrical sources.

Extinguishing Media :

Use water, foam, dry chemical or Carbon dioxide, sand or earth in case of small fires. The extinguishing water must be collected separately and disposed of as a waste. At no instance, this contaminated water will be discharged to the environment or into sewage, city or municipal waters. Material can accumulate static discharge. Empty containers still retain residue, a liquid & or vapor mixture.

Protective Equipment:

Wear full protective clothing and Self contained breathing apparatus for large spill/fire.

6. ACCIDENTAL RELEASE MEASURES

Observe all relevant local, State, Federal and International regulations as applicable.

Protective measures:

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment, please refer to section 8 and for disposal of spilled material refer to section 13 of this MSDS. Shut off leaks, if no risk is involved. Eliminate all possible ignition sources in surrounding area. Use appropriate containment methods to avoid further contamination to environment and to neighboring areas. Avoid spreading or entering the spilled material into the drains, ditches or rivers by using sand, earth or other appropriate barriers. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding all equipment. Monitor area with combustible gas indicator. A leaking drum or container can be rolled or made up side down in the direction opposite to the leaking spot

Clean Up Methods:

Use appropriate P.P.E. while handling the spill. Better if a HAZWOPER trained personnel handles the spill.

For small liquid spills (< 1 drum of 55 gal), transfer to a labeled, sealable container by mechanical means for safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely.

For large liquid spills (> 1 drum of 55 gal), transfer by mechanical means such as vacuum truck to a salvage tank for safe disposal. Retain as a contaminated waste. Allow residues to evaporate

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Unsuitable Materials:

Avoid prolonged contact with natural, butyl or nitrile rubbers.

Container Recommendation :

Emptied containers may still contain explosive vapors. Do Not cut, drill, grind or perform similar operations on or near containers Do not re-use empty containers without commercial cleaning or reconditioning.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Following table may be referred in absence of occupational standards for this material.

Material	Source	Type	PPM	mg/m ³
Acetone	ACGIH	TWA	500	-----
	ACGIH	STEL	750	-----
	OSHA	TWA	1000	-----
	Cal/OSHA	TWA	750	1780
	Cal/OSHA	STEL	1000	2400
Mineral Spirit	ACGIH	TWA	100	
	OSHA Z1	PEL	500	2,900 mg/m ³
	OSHA Z1 A	TWA	100	525 mg/m ³
1,2,4-Trimethylbenzene	NIOSH REL	TWA	25	125 mg/m ³

General Information :

Wash hands before eating, drinking, smoking and using toilet.

Exposure Control:

The levels of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local environment. Ensure adequate ventilation to control airborne concentration, below the exposure guidelines/limits. Eye washes and showers must be used in case of an emergency.

Personal Protective Equipment:

Use Personal Protective Equipment (P.P.E.) that are NIOSH approved and/or recommended per National Standards.

Respiratory Protection:

If an engineering control fail to maintain airborne concentrations to a level which is safe to protect workers' health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Also check with the Respiratory Protective

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Equipment suppliers and refer to the OSHA Respiratory Standard 1910.134 for detailed information. When air purifying respirator is required, select appropriate respirator and filters suitable for organic gases and vapors. Where air purifying respirators are un-suitable, for example airborne concentration is high, or oxygen is deficient, confined space etc., use appropriate positive pressure, breathing apparatus. For regular handling, full face respirator With organic vapor cartridges is recommended in order to protect the face from splashes.

Hand Protection:

Nitrile rubber gloves give good chemical resistance and can be used for regular use. In case of direct incidental contact, splash, clean up etc., PVC or Neoprene rubber gloves should be used.

Eye Protection:

Chemical Splash goggles (Chemical mono-goggles) should be used

Protective Clothing:

Use chemical resistant clothing, chemical resistant shoes or boots.

Environmental Exposure Controls:

Follow and comply with the local, state and federal guidelines for V.O.C. emission control limits, and for the discharge of exhaust air containing vapors of this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Colorless liquid
Odor	:	Distinct aromatic odor
Boiling point	:	62 ° C
Flash point	:	<100° F
Specific Gravity	:	0.85
Water Solubility	:	negligible.
Vapor Pressure	:	Not available
Vapor density (air =1)	:	Not available
Volatile Organic Compound	:	98gms/litre per AQMD method 304.91

10. STABILITY AND REACTIVITY

Stability:

Stable under normal conditions of use.

Conditions to Avoid:

Avoid heat, sparks, open flames and other ignition sources.

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Materials to Avoid:

Strong Oxidizing agents, Conc. Nitric or Sulfuric acid, halogens or molten sulfur.

Hazardous Decomposition Products:

Complex mixtures of airborne solids, liquids and gases including Carbon Monoxide, Carbon dioxide and other organic compounds will be evolved during combustion or thermal or oxidative degradation of this material.

11. TOXICOLOGICAL INFORMATION

Basis of Assessment:

The information given herein is based on similar products, and or compounds.

Mineral Spirits:

Acute Oral Toxicity: LD50: > 2000 mg/Kg

Rat: Aspiration into lungs when swallowed or vomited. May cause chemical pneumonitis.

Acute Dermal Toxicity: Low dermal toxicity.

Acute Inhalation Toxicity: Low toxicity.

LC50 greater than near-saturated vapor concentration/ 1 hour, rat.

Carcinogenicity: Not classified as a human carcinogen by ACGIH or IARC.

12. ECOLOGICAL INFORMATION

Mineral spirits:

Acute Toxicity:

Fish and marine

animals:

Low toxicity: LC/EC/C50: > 1000 mg/l

Micro-organisms:

Fairly toxic: LC/EC/IC50: < or = 10 mg/l

Acetone:

Acetone is not expected to be toxic to aquatic life.

Persistence/degradability: Moderately bio-degradable, by reaction with photo-chemically produced hydroxyl radicals.

13. DISPOSAL METHODS

Material Disposal:

Recover or recycle if possible. It is the responsibility of the waste generator to determine the

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the waste of this material must determine its waste classification and disposal methods in compliance with local, state and federal or other regulations.

Container Disposal:

Drain the container thoroughly, and then vent it in a safe place away from sparks, and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld un-cleaned containers. Send the waste drum to the drum re-corer or re-claimer.

Local Regulatory Compliance:

The disposal should be in compliance with applicable local, regional, state and national laws and regulations.

14. TRANSPORT INFORMATION

U. S. Department of Transportation Classification (49 CFR)

Identification number: UN 1993
Proper shipping name: Flammable liquid, n. o. s. (Acetone, petroleum distillate)
Class/Division: 3
Packing Group: II
Emergency Response Guide No.: 128

15. REGULATORY INFORMATION

Federal Regulatory Status:

Notification:

- **TSCA:** All ingredients in this compound are listed on TSCA list.
- **SARA TITLE III, Sections 311, 312 :** Classified as Fire hazard.
- **SARA 313 (TRI):** None.

State Regulatory Information:

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

This material **does not** contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

There may be some impurities from the original manufacturers/distributors, of which we are not aware of. Such impurities may or may not cause cancer or reproductive harm or birth effects.

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16. OTHER INFORMATION

HMIS Rating:

H=1, F=3, R = 0

(Health, Flammability & Reactivity)

NFPA Rating :

H=1, F=3, R = 0

(Health, Flammability & Reactivity)

MSDS Revision level:

New – Initial Release/07-19-05

Uses and Restrictions:

Industrial solvent for cleaning purposes.

MSDS Distribution:

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Disclaimer:

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**Low-VOC Cleaner Tested at Fanfare Media Works, Print 200, Western Metal
Decorating, The Printery and Tedco**

SOYGOLD 2500 RINSEABLE SOLVENT

Material Safety Data Sheet

SECTION I – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identity (As Used on Label and List) SOYGOLD 2500 RINSEABLE SOLVENT - EXPERIMENTAL		<i>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.</i>
Chemical Name: C ₁₂ -C ₁₈ , C ₁₈ Unsaturated Ethoxylated Methyl Ester/Surfactant Blend	Synonym Name: Rinseable Solvent, Soy Methyl Ester/Surfactant Cleaner Concentrate	
Another Exclusive Product of: AG Environmental Products, L.L.C.	Emergency Telephone Number 402-496-6688 Chemtree 800-424-9300	
Address (Number, Street, City, State, and ZIP Code) 12700 West Dodge Road Omaha, NE 68154	Telephone Number for Information 1-800-599-9209	
	Date Prepared February 4, 2005	

SECTION II – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS No.	OSHA PEL	ACGIH-TLV	Other Limits Recommended	%(Opt.)
In accordance with 29 CFR 1910.1200, this product does not contain sufficient concentrations of any substances defined as hazardous by this standard					

There are no exposure limits established for this product.

SECTION III – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW – Caution! May Cause Eye Irritation. A light yellow liquid that may cause eye and skin irritation. No hazard if spilled and no unusual hazard if involved in a fire. Slippery, can cause fall if spilled and walked on.

POTENTIAL HEALTH EFFECTS –

EYES – May cause eye irritation.

SKIN – May cause skin irritation.

INHALATION – Exposure via inhalation not likely. No hazard in normal industrial use.

INGESTION – No significant adverse effects are expected upon ingestion of the products.

SECTION IV – FIRST AID MEASURES

EYES – In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists get medical attention.

SKIN – In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. If irritation persists get medical attention. Wash clothing before reuse.

INHALATION – No need for first aid is anticipated not likely exposure route.

INGESTION – No need for first aid is anticipated if material is swallowed.

SECTION V – FIRE FIGHTING MEASURES

Flash Point (Method Used)	Flammable Limits	LEL	UEL
>160 C° (D93 Flash Point – Pensky Martens Closed Cup)	No Data	No Data	No Data

Extinguishing Media -

Not usually necessary as this product does not readily support combustion. Use media appropriate for fire's fuel source. CO₂, dry chemical, foam.

Special Fire Fighting Procedures – Cool exposed equipment with water spray until well after fire is out. Do not scatter spilled material with high pressure water streams. Dike fire control water for later disposal. Self contained breathing apparatus and structural firefighter's clothing will provide limited protection.

Unusual Fire and Explosion Hazards – None Expected.

SECTION VI – ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Caution, slip hazard. Wipe up small spills promptly. Use a cloth or other absorbent material.

LARGE SPILL: Isolate area. Dike area to prevent spreading. Stay upwind. Wear protective gear as required. Pick up on absorbent material. Put in suitable container for proper disposal.

SECTION VII – HANDLING AND STORAGE

HANDLING: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

STORAGE: Store indoors in a dry area. Follow label directions carefully. Keep out of reach of children. Keep container tightly sealed when not in use. Do not contaminate water or feed by use or storage. Use from original container only. Do not store with fertilizers, seeds, insecticides or fungicides.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection (Specify Type) – Use with adequate ventilation. Use NIOSH/MSHA approved respirator if PELs or TLVs are exceeded.

Engineering Controls	Local Exhaust	Not usually needed	Special	None
	Mechanical (General)	Yes	Other	None

Protective Gloves - Impervious

Eye Protection - Safety glasses or goggles

Other Protective Clothing or Equipment -

Not usually necessary. If direct contact is possible, wear apron, boots, face shield, etc. as needed.

Work/Hygienic Practices -

Follow label instructions. Wash hands after use and before eating, drinking, smoking, using restrooms, etc.

SECTION IX -- PHYSICAL AND CHEMICAL PROPERTIES				
Boiling Point	No Data	Specific Gravity (H ₂ O = 1)	@77°F / 25°C	0.93
Vapor Pressure (mm-Hg @ 68° F)	No Data	Melting Point		No Data
Vapor Density (AIR = 1)	Greater than one (1)	Evaporation Rate (Butyl Acetate = 1)		No Data
Solubility in Water	Partially Soluble	pH		NA
Appearance and Odor	A yellow liquid with a faint sweet odor.		VOC's—No Data	10 gm/l
SECTION X -- STABILITY AND REACTIVITY				
Chemical Stability	Stable	Conditions to Avoid -- None known		
Incompatibility (Materials to Avoid) - Strong oxidizing and reducing agents, strong alkalis and strong acids				
Hazardous Decomposition or Byproducts - Carbon dioxide, carbon monoxide, smoke, soot and various organic oxidation by-products.				
Hazardous Polymerization	Will Not Occur	Conditions to Avoid - NA		
SECTION XI -- TOXICOLOGICAL INFORMATION				
Ingestion LD ₅₀	No Data	Acute Dermal LD ₅₀	No Data	
Acute Oral LD ₅₀	No Data	Acute Inhalation LC ₅₀	No Data	
SECTION XII -- ECOLOGICAL INFORMATION				
No Data				
SECTION XIII -- DISPOSAL CONSIDERATIONS				
If this product as supplied 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.				
SECTION XIV -- TRANSPORT INFORMATION (Not meant to be all inclusive)				
Domestic Highway		Domestic Air Shipments		
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Fatty Methyl Ester C ₁₄ -C ₁₈ Ethoxylate)		Proper Shipping Name: Unknown		
Hazard Class/Subsidiary Hazard:	Class 9	Hazard Class/Subsidiary Hazard:	Unknown	
UN/NA No.:	3082	UN/NA No.:	Unknown	
Label Required:	None	Label Required:	Unknown	
SECTION XV -- REGULATORY INFORMATION (Not meant to be all inclusive - selected regulations represented)				
NFPA Rating	Health 2	Fire 0	Reactivity 0	
HMS Rating	Health 2	Flammability 0	Reactivity 0	
U.S. FEDERAL REGULATIONS:				
OSHA: There are no exposure limits established for this product. Not hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).				
CERCLA: SARA TITLE III SECTION 311/312 HAZARD CLASSES:				
Fire	None Noted			
Acute Health	None Noted			
Reactive	None Noted			
Chronic Health	None Noted			
Release of Pressure	None Noted			
SARA TITLE III SECTION 313:				
This product is not known to contain any compound listed and in quantities requiring reporting under SARA Title III Section 313.				
TSCA: NA				
SNAP: NA				
HAPS: Not listed.				
INTERNATIONAL REGULATIONS:				
CANADIAN WHMIS:				
CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): All components of this product are on the Domestic Substances List (DSL), and acceptable for use under the provisions of CEPA.				
EINECS: All components of this product are on the European Inventory of Existing Commercial Chemical Substances.				
STATE REGULATIONS:				
STATE RIGHT-TO-KNOW REGULATIONS: Any substance listed as hazardous under labor statutes by the States of California, Florida, Illinois, Michigan, New Jersey, Ohio, Pennsylvania or Texas is described in Section II above if known present in regulated concentrations.				
CALIFORNIA PROPOSITION 65: This product is not known to contain any material listed under California's Proposition 65.				
SECTION XVI -- OTHER INFORMATION				
MSDS Status: Revised Section(s):				

WARNING: The use of this product is beyond the control of the manufacturer and distributor, therefore, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The user must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials. The manufacturer and distributor warrant only that this product meets the specifications for such product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, PRODUCTIVENESS, OR ANY OTHER MATTER OF THIS PRODUCT. THE MANUFACTURER AND DISTRIBUTOR SHALL BE IN NO WAY RESPONSIBLE FOR THE PROPER USE OF THIS PRODUCT. The sole and exclusive remedy against the manufacturer and distributor for breach of warranty shall be reimbursement of the purchase price of the product in the event that a defective condition of the product shall be found to exist. NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE.

**Low-VOC Magic Wash 522C Cleaner Tested at The Castle Press and
The Dot Printer**

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Trade Name: MAGIC WASH 522C
Generic Name: Lithographic Press Wash

CAS #: Proprietary Blend

Manufacturer: Siebert, Inc.
Address: 8134 West 47th Street
City: Lyons State: IL Zip: 60534

Emergency phone#: (800) 535-5053
Technical phone#: (708) 442-2010

DOT Hazard Classification: Not Regulated
NFPA Codes: Health - 0 Flammability - 0 Reactivity - 0
HMIS Codes: Health - 1 Flammability - 0 Reactivity - 0 Personal Protection - B

II. HAZARDOUS INGREDIENTS

If present, IARC, NTP, and OSHA carcinogens and chemicals subject to the reporting requirements of SARA Title III Section 313 are identified in this section.

Ingredient Name	CAS Number	%wt	TLV	STEL	SARA TITLE III
Fatty esters	Various	70 to 90	None established	None established	No
Surfactants	Various	15 to 30	None established	None established	No

References: 29CFR 1910.1000, ACGIH "Threshold Limit Values for Chemicals in the Workplace", National Toxicology Program Annual Report, International Agency for Research on Cancer Monographs, and 40CFR Part 372. All components of this product are in compliance with TSCA.

III. PHYSICAL DATA

Boiling Point @ 760 mm Hg:	308 - 335°F
Vapor Pressure @ 80°F:	<0.1 mm Hg
Specific Gravity @ 68°F:	0.92
Water Solubility (%):	Insoluble
Specific Vapor Density (air=1):	<1.0
% Volatile by Volume:	<2.0
% Volatile Organic Compound(s):	<2.0
Appearance:	Clear golden liquid
Odor:	Typical organic odor

IV. FIRE AND EXPLOSION DATA

Flash Point (Method): >300°F (TCC)
Explosive Limit: LEL - N/E UEL - N/E
Extinguishing Media: Water fog, carbon dioxide, or dry chemical.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus when fighting chemical fires.
Unusual Fire and Explosion Hazards: Fine sprays/mists may be combustible at temperatures below normal flash point.
Rags soaked with material, stored for a long period while mixed with strong alkali or acidic materials, may smolder, then smoke, and may even ignite.

V. HEALTH HAZARD DATA

Eyes - May cause temporary irritation, redness, tearing, blurred vision. Contact lenses must not be worn when possibility exists for eye contact due to spraying liquid or airborne particles.
Skin - Prolonged or repeated contact may cause irritation.

MAGIC WASH 522C

Breathing - Excessive inhalation of vapors may cause nasal and respiratory irritation, central nervous system effects including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

Swallowing - Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

First Aid/Emergency Procedures

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet and get medical attention.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use.

Eyes: Flush with copious amounts of water. Get medical attention.

Ingestion: Do not induce vomiting. If large quantity is swallowed, give lukewarm water (pint). NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Get medical attention immediately. Risk of damage to lungs exceeds poisoning risk.

Primary Entry Route(s): Inhalation, skin contact.

Chronic Health Effects: Chronic overexposure may aggravate existing skin, eye and lung conditions.

VI. REACTIVITY DATA

Stability: Stable.

Hazardous Polymerization: Cannot occur.

Incompatibilities: Avoid contact with strong oxidizing materials, strong alkalis, strong mineral acids.

Hazardous Decomposition Products: Carbon mono/di oxides.

Conditions to Avoid: None

VII. SPILL OR LEAK PROCEDURES

Procedures for Spill/Leak:

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks, etc.).

Small Spill - Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and transfer to a recovery drum.

Large Spill - Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into recovery drums. Prevent run-off to sewers, streams or other bodies of water. Notify proper authorities, as required, that a spill has occurred.

Waste Management:

Landfill solids at permitted sites. Use registered transporters. Burn concentrated liquids at permitted sites. Avoid flameouts. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade. Avoid overloading/poisoning plant biomass. Assure effluent complies with applicable regulations.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection:

If workplace exposure limit(s) of product is exceeded, a NIOSH/MSHA approved air supplied respirator is advised in the absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

Ventilation: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain minimum exposure.

Eye Protection: Chemical Splash Proof Goggles and full face shield are advised for operations where eye or face contact can occur.

Gloves: Wear impervious gloves.

Other Protective Equipment: To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

IX. SPECIAL PRECAUTIONS

MAGIC WASH 522C

Special Handling/Storage:

To avoid skin contact and ingestion, wash hands and face well before eating or smoking. Do not permit food in work area. Avoid breathing mists if generated. Store at room temperature. Reseal container when not in use. Do not store near acids, bases or flammable liquids. Containers of this material should be rinsed when emptied, since emptied containers retain product residues (vapor, liquid, and/or solid). All hazard precautions given in this data sheet must be observed.

As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

Date revised: 04/01/2001

jpm

**Low-VOC Cleaner Tested at Lithographix, Tedco, Oberthur Card Systems and
Huhtamaki**

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Trade Name: MAGIC UV WASH
Generic Name: Lithographic UV / EB Ink Roller Wash

CAS #: Proprietary Blend

Manufacturer: SIEBERT, INC.
Address: 8134 West 47th Street
City: Lyons State: IL Zip: 60534 USA

Emergency Phone #: (800) 535-5053
Technical Phone #: (708) 442-2010

DOT Hazard Classification: Not Regulated
NFPA Codes: Health - 1 Flammability - 0 Reactivity - 0
HMIS Codes: Health - 1 Flammability - 0 Reactivity - 0 Personal Protection - B

II. HAZARDOUS INGREDIENTS

If present, IARC, NTP, and OSHA carcinogens and chemicals subject to the reporting requirements of SARA Title III Section 313 are identified in this section.

Ingredient Name	CAS #	%wt	TLV	STEL	SARA TITLE III
Surfactants	Various	70 to 90	None established	None established	No

References: 29CFR 1910.1000, ACGIH "Threshold Limit Values for Chemicals in the Workplace", National Toxicology Program Annual Report, International Agency for Research on Cancer Monographs, and 40CFR Part 372. All components of this product are in compliance with TSCA.

III. PHYSICAL DATA

Boiling Point @ 760 mm Hg, (initial):	212°F
Vapor Pressure @ 80°F:	<1 mm Hg
Specific Gravity @ 68°F:	0.99
Water Solubility (%):	Soluble
Specific Vapor Density (air=1):	<1
% Volatile by Volume:	~30
% Volatile Organic Compound(s),(EPA Method 24):	<2.0
Appearance:	Clear liquid
Odor:	Mild organic odor

IV. FIRE AND EXPLOSION DATA

Flash Point (Method): Not Applicable
Explosive Limit: LEL - N/E UEL - N/E
Extinguishing Media: Water fog, carbon dioxide, or dry chemical.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus when fighting chemical fires.
Unusual Fire and Explosion Hazards: None Known.

V. HEALTH HAZARD DATA

Eyes - May cause severe irritation, tearing, blurred vision. Contact lenses must not be worn when possibility exists for eye contact due to spraying liquid or airborne particles.
Skin - Prolonged or repeated contact may cause irritation.
Breathing - Excessive inhalation of vapors can cause nasal and respiratory irritation, central nervous system effects including dizziness, fatigue, nausea, and headache.
Swallowing - Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

First Aid/Emergency Procedures

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet and get medical attention.

Mazic L V Wash

Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use.

Eyes: Flush with copious amounts of water. Get medical attention.

Ingestion: Do not induce vomiting. If large quantity is swallowed, give lukewarm water (pint). NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Get medical attention immediately. Risk of damage to lungs exceeds poisoning risk.

Primary Entry Route(s): Inhalation, eye contact, skin contact.

Chronic Health Effects: Chronic overexposure may aggravate existing skin, eye and lung conditions.

VI. REACTIVITY DATA

Stability: Stable.

Hazardous Polymerization: Cannot occur.

Incompatibilities: Avoid contact with strong oxidizing materials, strong mineral acids and chlorine bleach.

Hazardous Decomposition Products: Carbon mono/di oxides.

Conditions to Avoid: None known.

VII. SPILL OR LEAK PROCEDURES

Procedures for Spill/Leak:

Small Spill - Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and transfer to a recovery drum.

Large Spill - Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into recovery drums. Prevent run-off to sewers, streams or others bodies of water. Notify proper authorities, as required, that a spill has occurred.

Waste Management:

Landfill solids at permitted sites. Use registered transporters. Burn concentrated liquids at permitted sites. Avoid flameouts. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade. Avoid overloading/poisoning plant biomass. Assure effluent complies with applicable regulations.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: If workplace exposure limit(s) of product is exceeded, a NIOSH/MSHA approved air supplied respirator is advised in the absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

Ventilation: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain minimum exposure.

Eye Protection: Chemical Splash Proof Goggles and full face shield are advised for operations where eye or face contact can occur.

Gloves: Wear impervious gloves.

Other Protective Equipment: To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

IX. SPECIAL PRECAUTIONS

Special Handling/Storage:

To avoid skin contact and ingestion, wash hands and face well before eating or smoking. Do not permit food in work area. Avoid breathing mists if generated. Store at temperatures between 45°F and 110°F. Do not freeze. Reseal container when not in use. Do not store near acids, bases or flammables. Containers of this material should be rinsed when emptied, since emptied containers retain product residues (vapor, liquid, and/or solid). All hazard precautions given in this data sheet must be observed.

As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

Date revised: 11/01/2001

jpm

Low-VOC Cleaner Ingredient Tested at Anderson and Oberthur Card Systems

008669

GLYCOL ETHER DPM

Page: 1

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (THE HAZARD COMMUNICATION STANDARD)

Product Name: GLYCOL ETHER DPM
CAS NUMBER: 34590-94-8

05 50 088 0936060-

Data Sheet No: 0003866-005
Prepared: 10/05/89
Supersedes: 03/04/86BENCO SALES INC
P O BOX 1415
CROSSVILLE TN 38557PRODUCT: 3989160
INVOICE: 850542
INVOICE DATE: 10/23/89
TO: BENCO SALES INC
STOUT DRIVE
CROSSVILLE TN 38555

ATTN: PLANT MGR./SAFETY DIR.

SECTION I - PRODUCT IDENTIFICATION

General or Generic ID: GLYCOL ETHER

DOT Hazard Classification: COMBUSTIBLE (173.115)

SECTION II - COMPONENTS

IF PRESENT, IARC, NTP AND OSHA CARCINOGENS AND CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III SECTION 313 ARE IDENTIFIED IN THIS SECTION. SEE DEFINITION PAGE FOR CLARIFICATION

INGREDIENT	% (by WT)	PEL	TLV	Note
DIPROPYLENE GLYCOL MONOMETHYL ETHER CAS #: 34590-94-8	>95	100 PPM - SKIN	100 PPM - SKIN	(1)

Notes:

(1) SKIN ABSORPTION MAY POTENTIALLY CONTRIBUTE TO THE OVERALL EXPOSURE TO THIS MATERIAL. APPROPRIATE MEASURES SHOULD BE TAKEN TO PREVENT ABSORPTION SO THAT THE TLV IS NOT INVALIDATED.

OSHA/ACGIH SHORT TERM EXPOSURE LIMIT (STEL) FOR DIPROPYLENE GLYCOL MONOMETHYL ETHER IS 150 PPM.

SECTION III - PHYSICAL DATA

Boiling Point	for PRODUCT	356.00 - 378.00 Deg F (180.00 - 192.22 Deg C)
Vapor Pressure	for PRODUCT	< 0.10 mm Hg 68.00 Deg F 20.00 Deg C)
Specific Vapor Density	AIR = 1	5.1
Specific Gravity		.953 - .959 68.00 Deg F 20.00 Deg C)
Percent Volatiles		100.00%
Evaporation Rate	(BU AC = 1)	.80

SECTION IV - FIRE AND EXPLOSION INFORMATION

FLASH POINT(TCC) 167.0 Deg F (75.0 Deg C)

EXPLOSIVE LIMIT (PRODUCT) LOWER - 1.1%

EXTINGUISHING MEDIA: ALCOHOL FOAM OR CARBON DIOXIDE OR DRY CHEMICAL

HAZARDOUS DECOMPOSITION PRODUCTS: MAY FORM TOXIC MATERIALS:, CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS, ETC.

FIREFIGHTING PROCEDURES: WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES.

SPECIAL FIRE & EXPLOSION HAZARDS: VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR BE MOVED BY VENTILATION AND IGNITED BY HEAT, PILOT LIGHTS, OTHER FLAMES AND IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT.

NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

ALL FIVE GALLON PAILS AND LARGER METAL CONTAINERS INCLUDING TANK CARS AND TANK TRUCKS SHOULD BE GROUNDED AND/OR BONDED WHEN MATERIAL IS TRANSFERRED.

NFPA CODES: HEALTH- 0 FLAMMABILITY- 2 REACTIVITY- 0

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL	100	PPM - SKIN
THRESHOLD LIMIT VALUE (SKIN)	100	PPM - SKIN

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CONTINUED ON PAGE: 2

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GLYCOL ETHER DPM

Page: 2

~~SECTION IV - HEALTH HAZARD DATA (Continued)~~EFFECTS OF ACUTE OVEREXPOSURE: FOR PRODUCT

EYES - CAN CAUSE IRRITATION.
 SKIN - CAN CAUSE SLIGHT IRRITATION.
 BREATHING - EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION AND CENTRAL NERVOUS SYSTEM EFFECTS INCLUDING DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS.
 SWALLOWING - SLIGHTLY TOXIC. MAY PRODUCE SIGNS OF INTOXICATION CHARACTERIZED BY INCOORDINATION, DIZZINESS, DROWSINESS, HEADACHE, NAUSEA, MENTAL CONFUSION, POSSIBLY SLURRED SPEECH, AND STUPOR, DEPENDING ON THE QUANTITY OF MATERIAL INGESTED.

FIRST AID:

IF ON SKIN: THOROUGHLY WASH EXPOSED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. LAUNDRY CONTAMINATED CLOTHING BEFORE RE-USE.
 IF IN EYES: FLUSH WITH LARGE AMOUNTS OF WATER, LIFTING UPPER AND LOWER LIDS OCCASIONALLY.
 IF SWALLOWED: IMMEDIATELY DRINK TWO GLASSES OF WATER AND INDUCE VOMITING BY EITHER GIVING IPECAC SYRUP OR BY PLACING FINGER AT BACK OF THROAT. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION IMMEDIATELY.
 IF BREATHED: IF AFFECTED, REMOVE INDIVIDUAL TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. KEEP PERSON WARM, QUIET AND GET MEDICAL ATTENTION.

PRIMARY ROUTE(S) OF ENTRY:

INHALATION, SKIN ABSORPTION, SKIN CONTACT

EFFECTS OF CHRONIC OVEREXPOSURE: FOR PRODUCT

OVEREXPOSURE TO THIS MATERIAL (OR ITS COMPONENTS) HAS APPARENTLY BEEN FOUND TO CAUSE THE FOLLOWING EFFECTS IN LABORATORY ANIMALS: LIVER ABNORMALITIES, KIDNEY DAMAGE

~~SECTION VI - REACTIVITY DATA~~

HAZARDOUS POLYMERIZATION: CANNOT OCCUR

STABILITY: STABLE

INCOMPATIBILITY: AVOID CONTACT WITH: STRONG OXIDIZING AGENTS.

~~SECTION VII - SPILL, LEAK, OR BREAK PROCEDURES~~STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

SMALL SPILL: ABSORB LIQUID ON PAPER, VERMICULITE, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND TRANSFER TO HOOD.

VENTILATE AREA.

LARGE SPILL: ELIMINATE ALL IGNITION SOURCES (FLARES, FLAMES INCLUDING PILOT LIGHTS, ELECTRICAL SPARKS). PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE, DIKE AREA OF SPILL TO PREVENT SPREADING, PUMP LIQUID TO SALVAGE TANK. REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY, EARTH, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND SHOVELED INTO CONTAINERS.

PREVENT RUN-OFF TO SEWERS, STREAMS OR OTHER BODIES OF WATER. IF RUN-OFF OCCURS, NOTIFY PROPER AUTHORITIES AS REQUIRED, THAT A SPILL HAS OCCURRED.

WASTE DISPOSAL METHOD:

SMALL SPILL: DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

LARGE SPILL: DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

~~SECTION VIII - PROTECTIVE EQUIPMENT TO BE USED~~

RESPIRATORY PROTECTION: IF WORKPLACE EXPOSURE LIMIT(S) OF PRODUCT OR ANY COMPONENT IS EXCEEDED (SEE SECTION II), A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS (NEGATIVE PRESSURE TYPE) UNDER SPECIFIED CONDITIONS (SEE YOUR SAFETY EQUIPMENT SUPPLIER). ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

VENTILATION: PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

PROTECTIVE GLOVES: WEAR RESISTANT GLOVES SUCH AS: NITRILE RUBBER, NATURAL RUBBER

EYE PROTECTION: CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED; HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES. (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER)

OTHER PROTECTIVE EQUIPMENT: TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

~~SECTION IX - SPECIAL PRECAUTIONS OR OTHER COMMENTS~~

CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERVED.

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

DEFINITIONS

This definition page is intended for use with Material Safety Data Sheets supplied by the Ashland Chemical Company. Recipients of these data sheets should consult the OSHA Safety and Health Standards (29 CFR 1910), particularly subpart G - Occupational Health and Environmental Control, and subpart I - Personal Protective Equipment, for general guidance on control of potential Occupational Health and Safety Hazards.

SECTION I PRODUCT IDENTIFICATION

GENERAL OR GENERIC ID: Chemical family or product description.

DOT HAZARD CLASSIFICATION: Product meets DOT criteria for hazards listed.

SECTION II COMPONENTS

Components are listed in this section if they present a physical or health hazard and are present at or above 1% in the mixture. If a component is identified as a CARCINOGEN by NTP, IARC or OSHA as of the date on the MSDS, it will be listed and footnoted in this section when present at or above 0.1% in the product. Negative conclusions concerning carcinogenicity are not reported. Additional health information may be found in Section V. Components subject to the reporting requirements of Section 313 of SARA Title III are identified in the footnotes in this section, along with typical percentages. Other components may be listed if deemed appropriate.

Exposure recommendations are for components. OSHA Permissible Exposure Limits (PELs) and American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) appear on the line with the component identification. Other recommendations appear as footnotes.

SECTION III PHYSICAL DATA

BOILING POINT: Of product if known. The lowest value of the components is listed for mixtures.

VAPOR PRESSURE: Of product if known. The highest value of the components is listed for mixtures.

SPECIFIC VAPOR DENSITY: Compared to AIR = 1. If Specific Vapor Density of product is not known, the value is expressed as lighter or heavier than air.

SPECIFIC GRAVITY: Compared to WATER = 1. If Specific Gravity of product is not known, the value is expressed as less than or greater than water.

pH: If applicable.

PERCENT VOLATILES: Percentage of material with initial boiling point below 425 degrees Fahrenheit.

EVAPORATION RATE: Indicated as faster or slower than ETHYL ETHER, unless otherwise stated.

SECTION IV FIRE AND EXPLOSION DATA

FLASH POINT: Method identified.

EXPLOSION LIMITS: For product if known. The lowest value of the components is listed for mixtures.

HAZARDOUS DECOMPOSITION PRODUCTS: Known or expected hazardous products resulting from heating, burning or other reactions.

SECTION IV (cont.)

EXTINGUISHING MEDIA: Following National Fire Protection Association criteria.

FIREFIGHTING PROCEDURES: Minimum equipment to protect firefighters from toxic products of vaporization, combustion or decomposition in fire situations. Other firefighting hazards may also be indicated.

SPECIAL FIRE AND EXPLOSION HAZARDS: States hazards not covered by other sections.

NFPA CODES: Hazard ratings assigned by the National Fire Protection Association.

SECTION V HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LIMIT: For product.

THRESHOLD LIMIT VALUE: For product.

EFFECTS OF ACUTE OVEREXPOSURE: Potential local and systemic effects due to single or short term overexposure to the eyes and skin or through inhalation or ingestion.

EFFECTS OF CHRONIC OVEREXPOSURE: Potential local and systemic effects due to repeated or long term overexposure to the eyes and skin or through inhalation or ingestion.

FIRST AID: Procedures to be followed when dealing with accidental overexposure.

PRIMARY ROUTE OF ENTRY: Based on properties and expected use.

SECTION VI REACTIVITY DATA

HAZARDOUS POLYMERIZATION: Conditions to avoid to prevent hazardous polymerization resulting in a large release of energy.

STABILITY: Conditions to avoid to prevent hazardous or violent decomposition.

INCOMPATIBILITY: Materials and conditions to avoid to prevent hazardous reactions.

SECTION VII SPILL OR LEAK PROCEDURES

Reasonable precautions to be taken and methods of containment, clean-up and disposal. Consult federal, state and local regulations for accepted procedures and any reporting or notification requirements.

SECTION VIII PROTECTIVE EQUIPMENT TO BE USED

Protective equipment which may be needed when handling the product.

SECTION IX SPECIAL PRECAUTIONS OR OTHER COMMENTS

Covers any relevant points not previously mentioned.

ADDITIONAL COMMENTS

Containers should be either reconditioned by CERTIFIED firms or properly disposed of by APPROVED firms. Disposal of containers should be in accordance with applicable laws and regulations. "EMPTY" drums should not be given to individuals. Serious accidents have resulted from the misuse of "EMPTIED" containers (drums, pails, etc.). Refer to Sections IV and IX.

Low-VOC Cleaner Ingredient Tested at Anderson

EASTMAN

MATERIAL SAFETY DATA SHEET

Revision Date: 07/15/2004
MSDSANS/ANSI/EN/150000001149/Version 12.0

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Eastman(TM) EEP Solvent
Product Identification Number(s)	12470-00, P1247000, P1247001, P1247002, P1247003, P1247004, P1247005, P1247006, P1247007, P1247008, P1247010, P1247009, P12470M2, P12470M4, P1247011
Manufacturer/Supplier	Eastman Chemical Company Eastman Road Kingsport, TN 37662 US
MSDS Prepared by	Eastman Product Safety and Health
Chemical Name	3-ethoxypropanoic acid, ethyl ester
Synonym(s)	12470-00 970309
Molecular Formula	C7H14O3
Molecular Weight	146.19
Product Use	solvent
OSHA Status	hazardous

For emergency health, safety & environmental information, call 800-EASTMAN.

For emergency transportation information, call CHEMTREC at 800-424-9300 or call 800-EASTMAN.

2. COMPOSITION INFORMATION ON INGREDIENTS

(Typical composition is given, and it may vary. A certificate of analysis can be provided, if available.)

Weight %	Component	CAS Registry No.
>99.5%	ethyl 3-ethoxypropionate	763-69-9
<0.02%	formaldehyde	50-00-0
<0.02%	butylated hydroxytoluene (as inhibitor)	128-37-0

3. HAZARDS IDENTIFICATION

CAUTION!
COMBUSTIBLE LIQUID AND VAPOR
FORMS PEROXIDES IF MATERIAL BECOMES UNINHIBITED
HIGH VAPOR CONCENTRATIONS MAY CAUSE DROWSINESS

HMIS® Hazard Ratings: Health - 1, Flammability -2, Chemical Reactivity - 1

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

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MATERIAL SAFETY DATA SHEET

Revision Date: 07/15/2004
MSDSANSI/ANSI/EN/150000001149/Version 12.0

4. FIRST-AID MEASURES

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.
Eyes: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.
Skin: Wash with soap and water. Get medical attention if symptoms occur.
Ingestion: Seek medical advice.

5. FIRE FIGHTING MEASURES

Extinguishing Media: water spray, carbon dioxide, dry chemical, foam
Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool. USE WATER WITH CAUTION. Material will float and may ignite on surface of water. Water may be ineffective in fighting the fire. The fire could easily be spread by the use of water in an area where the water could not be contained.
Hazardous Combustion Products: carbon dioxide, carbon monoxide
Unusual Fire and Explosion Hazards: Forms peroxides of unknown stability if material becomes uninhibited. Combustible.

6. ACCIDENTAL RELEASE MEASURES

Use personal protective equipment. Eliminate all ignition sources. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.
For Large Spills: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

7. HANDLING AND STORAGE

Personal Precautionary Measures: Avoid breathing high vapor concentrations. Use only with adequate ventilation. Wash thoroughly after handling.
Prevention of Fire and Explosion: Keep away from heat and flame. Keep from contact with oxidizing materials. Keep inhibited. Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. If peroxide formation is suspected, do not open or move container. Do not allow to evaporate to near dryness. Do not distill to near dryness.
Storage: Keep container closed.
Additional Information: Store away from heat and light.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Country specific exposure limits have not been established or are not applicable unless listed below.

ETHYL 3-ETHOXYPROPIONATE

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MATERIAL SAFETY DATA SHEET

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Eastman Chemical Company occupational exposure limit:
Time Weighted Average (TWA): 50 ppm,
Eastman Chemical Company occupational exposure limit:
Short Term Exposure Limit (STEL): 100 ppm,

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Eye Protection: It is a good industrial hygiene practice to minimize eye contact.

Recommended Decontamination Facilities: eye bath, washing facilities

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: liquid
Color: colorless
Odor: ester, pungent
Odor Threshold: 0.02 ppm
Specific Gravity: 0.95 (20 °C)
Vapor Pressure: 25 °C; 2.0 mbar
Vapor Density: 5.0
Freezing Point: <-50 °C
Boiling Point: 165 °C
Evaporation Rate: 0.12 (n-butyl acetate = 1)
Viscosity: 1.20 mPa.s (25 °C)
Solubility in Water: 29 g/l
Octanol/Water Partition Coefficient: P: 22.4; log P: 1.35
Flash Point: 59 °C (Setaflash closed cup)
Autoignition Temperature: 377 °C (ASTM E659)
Thermal Decomposition Temperature: (HPDTA) No exotherm to 400°C

10. STABILITY AND REACTIVITY

Stability: Stable. Forms peroxides if material becomes uninhibited.
Incompatibility: Material reacts with strong oxidizing agents.
Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

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MATERIAL SAFETY DATA SHEET

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Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

Oral LD-50:(male rat)	>5,000 mg/kg(highest dose tested)
Oral LD-50:(female rat)	4,300 mg/kg
Inhalation LC-50: (rat)	6 hours: > 1000 ppm (highest concentration tested)
Dermal LD-50: (guinea pig)	> 20 ml/kg (highest dose tested)
Skin Irritation (guinea pig)	slight
Eye Irritation (rabbit)	slight
Skin Sensitization: (guinea pig)	none

12. ECOLOGICAL INFORMATION

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

This material is readily biodegraded and is not likely to bioconcentrate.

Oxygen Demand Data:

BOD-5: 370 mg/g
BOD-20: 560 mg/g

COD: 1,920 mg/g
ThBOD: 1,970 mg/g

Acute Aquatic Effects Data:

96 h LC-50 (fathead minnow): 50 mg/l NOEC: 25 mg/l
48 h EC-50 (Daphnia magna): > 480 mg/l NOEC: 470 mg/l
72 h EC-50 (Selenastrum capricornutum): > 115 mg/l

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

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DOT (USA)

Class combustible liquid, Packing group III for quantities of 450 liters (119 gallons) or more; not regulated for smaller quantities

0

Marine pollutant:

Possible Shipping Description(s):

not regulated

Esters, n.o.s. (ethyl 3-ethoxypropionate)
combustible liquid UN III

Esters, n.o.s. (ethyl 3-ethoxypropionate)
combustible liquid UN 3272 III

Sea - IMDG (International Maritime Dangerous Goods)

Possible Shipping Description(s):

ESTERS, N.O.S. (ethyl 3-ethoxypropionate)
3 UN 3272 III

Air - ICAO (International Civil Aviation Organization)

Possible Shipping Description(s):

Esters, n.o.s. (ethyl 3-ethoxypropionate)
3 UN 3272 III

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Status: controlled

WHMIS (Canada) Hazard Classification: B/3

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EASTMAN

MATERIAL SAFETY DATA SHEET

Revision Date: 07/15/2004
MSDSANSI/ANSI/EN/150000001149/Version 12.0

SARA 311-312 Hazard Classification(s):

fire hazard
reactive hazard

SARA 313: none, unless listed below

Carcinogenicity Classification (components present at 0.1% or more): none, unless listed below

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

EINECS (European Inventory of Existing Commercial Chemical Substances): This product is listed on EINECS or otherwise complies with EINECS requirements.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.

16. OTHER INFORMATION

Visit our website at www.EASTMAN.com or call 001-423-229-2000.

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment.

Highlighted areas indicate new or changed information.

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Low-VOC Cleaner Ingredient Tested at Anderson

DATE: 06/01/04
INDEX: D41496288

PAGE: 8

ACCT: 385238002
CAT. NO. A3984

PO NUM: L2637/4355938-00

- OEL-AUSTRIA/TWA 100 ppm (100 mg/m3)
- OEL-BELGIUM/STEL 50 ppm (100 mg/m3); SKIN
- OEL-BELGIUM/STEL 100 ppm (100 mg/m3); SKIN
- OEL-BELGIUM/STEL 200 ppm (200 mg/m3); SKIN
- OEL-DENMARK/STEL 50 ppm (150 mg/m3); SKIN 75 ppm (225 mg/m3); SKIN
- OEL-DENMARK/STEL 100 ppm (150 mg/m3); SKIN 150 ppm (450 mg/m3); SKIN
- OEL-DENMARK/STEL 200 ppm (150 mg/m3); SKIN 300 ppm (900 mg/m3); SKIN
- OEL-JAPAN/STEL 50 ppm (100 mg/m3); SKIN
- OEL-THE NETHERLANDS/TWA 50 ppm (100 mg/m3); SKIN
- OEL-THE NETHERLANDS/STEL 100 ppm (100 mg/m3); SKIN
- OEL-THE NETHERLANDS/STEL 200 ppm (200 mg/m3); SKIN
- OEL-SWEDEN/TWA 15 ppm (45 mg/m3); STEL 30 ppm (90 mg/m3); SKIN
- OEL-SWITZERLAND/TWA 50 ppm (150 mg/m3); STEL 100 ppm/300 ppm/300 ppm (150 mg/m3); SKIN
- OEL-UNITED KINGDOM/TWA 10 ppm (100 mg/m3); STEL 50 ppm/100 ppm/100 ppm (100 mg/m3); SKIN
- OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA, CHECK ACCOI TLV
- OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACCOI TLV

*** SECTION 16 - ADDITIONAL INFORMATION ***

SDS Creation Date: 6/10/1999 Revision #7 Date: 10/29/2002
The information above is believed to be accurate and represents the best
mechanical or any other warranty, express or implied, or warranty of
information, and we assume no liability resulting from its use. Users
information for their particular purposes. We do not guarantee the
ability for any claims, losses, or damages of any third party or for loss
of data or equipment, incidental, consequential or exemplary
damages, however arising, if the company has been advised of
the possibility of such damages.

Low-VOC Hand Blanket Wash Tested at The Printery

**MATERIAL SAFETY DATA SHEET
RHO-CHEM CORPORATION**

(A Fully Owned Subsidiary of Philip Services Corporation)

425 Isis Avenue, Inglewood, California – 90301

Tel.: (323)776-6233, Fax: (310)645-6379

Product : **Rhosolv-7150 Blanket Wash**, Revision- Initial Release/3-03-06

Page No. 1 of 9

1. COMPANY AND MATERIAL IDENTIFICATION :

Product Name/Number : Rho-Solv 7150 Blanket Wash
Synonyms : N. A.
Chemical Family : Flammable Solvent Blend
Stock Number : Technical Grade –7150

2. COMPOSITION OF THE MATERIAL: MIXTURE

<u>Chemical Name</u>	<u>CAS No.</u>	<u>% Concentration</u>
Acetone	67-64-1	80 – 90%
Diethylene Glycol Monobutyl Ether	112-34-5	10 – 15%

3. HAZARDS IDENTIFICATION :

EXTREMELY FLAMMABLE LIQUID & VAPOR. MAY CAUSE FLASH FIRE.

Inhalation:

High concentration of vapors will be irritating to the respiratory tract and may cause dizziness, headache, and dizziness Central Nervous System effects & possibly death.

Ingestion:

Ingestion of larger amounts may produce abdominal pain, nausea and vomiting. Aspiration into lungs can cause lung damage.

Skin Contact:

May cause some irritation, drying, redness or cracking to skin

Eye Contact:

Vapors may be irritating to eyes. Splashing may cause redness and pain to eyes.

Symptoms & Signs to Exposure:

Basically, same symptoms and signs will occur, as given above.

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Medical Conditions Aggravated:

Pre-existing medical conditions of the Respiratory System, Skin dermatitis and Eyes may be aggravated by further exposure to this material.

4. FIRST AID :

Inhalation:

Remove the person to fresh air. If no improvement noticed, then transport to the nearest medical care facility for further treatment.

Ingestion:

If swallowed, do not induce vomiting. transport to the nearest medical care facility for further treatment.

Skin Contact:

Remove contaminated clothing. Flush exposed area with water followed by washing with soap.

Eye Contact:

Flush eyes with water with eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling persist, transport to the nearest medical care facility for further treatment.

Advice to Physician:

Causes CNS depression. Prolonged or repeated exposure may result in dermatitis.

5. FIRE FIGHTING MEASURES :

Clear the area of all non-emergency, un-protected personnel.

<u>Ingredient</u>	<u>Flash Point</u>	<u>U.F.L.</u>	<u>L.F.L.</u>	<u>Auto Ignition Temp.</u>
Acetone	-20° C – CC	12.8	2.5	465° C (869° F)
Diethylene Glycol	115° C – CC	----	0.9	204° C (399° F)
Monobutyl Ether				

Specific Hazards:

Carbon Monoxide may be evolved in case of incomplete combustion. Will float on the surface water and can be re-ignited. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup, which could result in container rupture. Containers exposed to direct flame should be cooled with large quantities of water as needed to prevent weakening of container structure or rupture.

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Extinguishing Media:

Use water, foam dry chemical or Carbon dioxide, sand or earth may be used in case of small fires. The extinguishing water must be collected separately and disposed of as a waste. At no instance, this contaminated water will be discharged to the environment or into sewage, city or municipal waters. Material can accumulate static discharge. Empty containers still retain residue, a liquid & or vapor mixture.

Protective Equipment:

Wear full protective clothing and Self contained breathing apparatus for large spill/fire.

6. ACCIDENTAL RELEASE MEASURES

Observe all relevant local, State, Federal and International regulations as applicable.

Protective measures:

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment, please refer to section 8 and for disposal of spilled material refer to section 13 of this MSDS. Shut off leaks, if no risk is involved. Eliminate all possible ignition sources in surrounding area. Use appropriate containment methods to avoid further contamination to environment and to neighboring areas. Avoid spreading or entering the spilled material into the drains, ditches or rivers by using sand, earth or other appropriate barriers. Attempt to Disperse the vapors to divert its flow to a safe location, by using fog sprays, for example. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding all equipment. Monitor area with combustible gas indicator. A leaking drum or container can be rolled or made up side down in the direction opposite to the leaking spot

Clean Up Methods:

For small liquid spills (< 1 drum of 55 gal), transfer to a labeled, seallable container by mechanical means for safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely.

For large liquid spills (> 1 drum of 55 gal), transfer by mechanical means such as vacuum truck to a salvage tank for safe disposal. Retain as a contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

Additional Information:

Notify appropriate authorities if there is a risk involved to the general public or to the environment or to the neighborhood due to the spill or release of this material. Vapor may form an explosive mixture with air. Please report to the National Response Center @ (800)424-8802 if the spilled quantity exceeds the reportable quantity. (Refer to chapter 15 of this MSDS. Required under CERCLA (Comprehensive Environment Response, Compensation & Liability Act).

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7. HANDLING AND STORAGE

General Precautions :

Avoid breathing of or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. Use appropriate P.P.E. per section 8 of this MSDS.

Handling:

Handle and open the container with **CARE** in well ventilated area. Remove ignition sources. Avoid sparks. **Do not create friction.** Keep container closed, to avoid emissions and inhalation. Avoid any force opening, creating friction. Avoid contact with skin, eyes and clothing. **Ensure electrical continuity by bonding and grounding all equipment.** Restrict line velocity during pumping in order to avoid generation of electrostatic discharge ($<= 1$ m./sec until fill pipe is submerged to twice its diameter, then $<= 7$ m/sec.) Avoid splash filling. Do not use compressed air for filling, discharging or handling operations. The vapor is heavier than air spreads along the ground and distant ignition is possible. Extinguish any naked flames. Do not smoke. Ventilate workplace in such a way that the Occupational Exposure Limit (OEL) is not exceeded. Do not empty into drains. **Avoid handling above its flash point**, otherwise the product will form flammable/explosive vapor-air mixtures.

Storage:

Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. Store at ambient temperature. Keep away from aerosols, oxidizers, corrosives.

Product Transfer:

Keep containers closed when not in use. Do not use compressed air for filling. Discharging or handling. Use grounding bonding wires during transfer.

Recommended Materials:

For containers or container linings, use mild steel or Stainless steel. For container paints, use epoxy paint, zinc silicate paint.

Unsuitable Materials:

Avoid prolonged contact with natural, butyl or nitrile rubbers.

Container Recommendation :

Emptied containers may still contain explosive vapors. Do Not cut, drill grind or perform similar operations on or near containers Do not re-use empty containers without commercial cleaning or reconditioning.

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EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Following table may be referred in absence of occupational standards for this material.

Material	Source	Type	PPM	mg/m ³
Acetone	OSHA	TWA	1000	-----
	Cal/OSHA	TWA	750	1780
	Cal/OSHA	STEL	1000	2400
	ACGIH	TWA	500	N.A
	ACGIH	STEL	750	N.A
Diethylene Glycol Monobutyl Ether	OSHA	TWA	135	N/A

General Information:

Wash hands before eating, drinking, smoking and using toilet.

Exposure Control:

The levels of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local environment. Ensure adequate ventilation to control airborne concentration, below the exposure guidelines/limits. Eye washes and showers must be used in case of an emergency.

Personal Protective Equipment:

Use Personal Protective Equipment (P.P.E.) that are NIOSH approved and/or recommended per National Standards.

Respiratory Protection:

If an engineering control fail to maintain airborne concentrations to a level which is safe to protect workers' health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Also check with the Respiratory Protective Equipment suppliers and refer to the OSHA Respiratory Standard 1910.134 for detailed information. When air purifying respirator is required, select appropriate respirator and filters suitable for organic gases and vapors. Where air purifying respirators are un-suitable, for example airborne concentration is high, or oxygen is deficient, confined space etc., use appropriate positive pressure, breathing apparatus. For regular handling, full face respirator With organic vapor cartridges is recommended in order to protect the face from splashes.

Hand Protection:

Nitrile rubber gloves give good chemical resistance and can be used for regular use. In case of direct incidental contact, splash, clean up etc., PVC or Neoprene rubber gloves should be used.

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Eye Protection:

Chemical Splash goggles (Chemical mono-goggles) should be used

Protective Clothing:

Use chemical resistant clothing, chemical resistant shoes or boots.

Environmental Exposure Controls:

Follow and comply with the local, state and federal guidelines for V.O.C. emission control limits, and for the discharge of exhaust air containing vapors of this material.

9. **PHYSICAL AND CHEMICAL PROPERTIES of Acetone, being a major component in this mixture.**

Appearance	:	Colorless volatile liquid
Odor	:	Distinct fragrant odor
Boiling point	:	56.5° C (133° F) @ 760 mm Hg
Vapor Pressure	:	400 @ 39.5°C (104°F)
Specific Gravity	:	0.79 @ 20°C
Water Solubility	:	Miscible in water
Vapor density (air =1)	:	2.0 (Air =1)
Volatile Organic Compound	:	114.4 gms/L as Diethyleneglycol Monobutyl Ether

10. **STABILITY AND REACTIVITY**

Stability:

Stable under normal conditions of use.

Conditions to Avoid:

Avoid heat, sparks, open flames and other ignition sources.

Materials to Avoid:

Strong Oxidizing agents, Conc. Nitric or Sulfuric acid, halogenated compounds

Hazardous Decomposition Products:

Will not occur.

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Product : **Rhosolv-7150 Blanket Wash**, Revision- Initial Release/3-03-06

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11. TOXICOLOGICAL INFORMATION

Basis of Assessment:

The information given herein is based on similar products, and or compounds.

Acetone:

Oral Toxicity: LD50: 5800 mg/kg , rat

Inhalation Toxicity: LC50 : 5, 100 mg/m³

Carcinogenicity: Not classified as a human carcinogen by ACGIH or IARC.

Diethyleneglycol Monobutyl Ether :

Acute Oral Toxicity:

Ingestion (rat) LD50: 7,292 mg/Kg

Oral (Mouse) LD50: 2,406 mg/Kg

Acute Dermal Toxicity:

Dermal (rabbit) LD50: 2,764 mg/Kg

Skin (rabbit): Slight irritant

Eye (rabbit): Moderate.

Carcinogenicity: Not a IARC or NTP carcinogen.

12. ECOLOGICAL INFORMATION

Acetone:

Acetone is not expected to be toxic to aquatic life.

Environmental Toxicity: Less toxic: LC50/96 – hour - > 100 mg/l

Mobility: Will quickly evaporate from water, will evaporate if released to soil.

Bioaccumulation: Does not bio-accumulate significantly.

Persistence/degradability: Moderately bio-degradable, by reaction with photo-chemically produced hydroxyl radicals.

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Diethyleneglycol Monobutyl Ether:

BOD – 5: 250 mg/g

COD: 2,080 mg/g

13. DISPOSAL METHODS

Material Disposal:

Recover or recycle if possible. It is the responsibility of a waste generator to determine the extent of hazard, and physical properties of the material generated. Additionally, the generator of the waste of this material must determine its waste classification and disposal methods in compliance with local, state and federal or other regulations.

Container Disposal:

Drain the container thoroughly, and then vent it in a safe place away from sparks, and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld un-cleaned containers. Send the waste drum to the drum re-corer or reclaimer.

Local Regulatory Compliance:

The disposal should be in compliance with applicable local, regional, state and national laws and regulations.

14. TRANSPORT INFORMATION

U. S. Department of Transportation Classification (49 CFR)

Identification number:	UN 1993
Proper shipping name:	Flammable liquid, n. o. s. (Acetone/ Diethyleneglycol Monobutyl ether mixture)
Class/Division:	3
Packing Group:	II
	Contains OIL
Emergency Response Guide No.:	128

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5. REGULATORY INFORMATION

Federal Regulatory Status:

Notification:

- TSCA Both the components of this mixture are listed on TSCA inventory.

SARA TITLE III, Sections 311, 312

Acetone is classified as fire hazard., and D.E.G.M.B.E. as acute hazard.

SARA Toxic Release Inventory (TRI) 313

State Regulatory Information:

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

Not listed.

South Coast Air Quality Management District:

VOC content: 114.4 g/l

6. OTHER INFORMATION

HMIS Rating:

H=1, F=3, R = 0

(Health, Flammability & Reactivity)

NFPA Rating :

H=1, F=3, R = 0

(Health, Flammability & Reactivity)

MSDS Revision level:

Initial Release /03-03-06

Uses and Restrictions:

Industrial Cleaning Solvent

MSDS Distribution:

The copy of this MSDS should be available to every one who may handle this material.

Disclaimer:

The content and format of this MSDS is in accordance with the OSHA Hazard Communication Standard, 29 CFR 1910.1200 and the information contained herein is to the best of our knowledge for its original form in which it is supplied and is intended as guidelines for the purpose of handler's and environmental safety. No warranty or guarantee is expressed or implied regarding the accuracy of this data or of the resulting product, using this material.

Low-VOC Cleaner Ingredient Tested at Tedco

VAN WATER & ROGER -- ISOPROPYL ALCOHOL -- 6505-00-261-7256

----- Product Identification -----

Product ID:ISOPROPYL ALCOHOL
 MSDS Date:05/01/1993
 FSC:6505
 NIIN:00-261-7256
 MSDS Number: BVGJL
 === Responsible Party ===
 Company Name:VAN WATER & ROGER
 Address:2600 CAMPUS DR
 Box:5932
 City:SAN MATEO
 State:CA
 ZIP:94403-2522
 Country:US
 Info Phone Num:714-864-2310
 Emergency Phone Num:800-424-9300
 Preparer's Name:C.A.EISENHARD
 CAGE:09N91
 === Contractor Identification ===
 Company Name:CHEMICAL COMMODITIES AGENCY, INC.
 Address:27447 PACIFIC STREET
 Box:City:HIGHLAND
 State:CA
 ZIP:92346-2640
 Country:US
 Phone:909-864-2310
 CAGE:60777
 Company Name:VAN WATER & ROGERS INC.,SUB OF UNIVAR
 Address:6100 CARILLON POINT
 Box:5932
 City:KIRKLAND
 State:WA
 ZIP:98033
 Country:US
 Phone:206-889-3400
 CAGE:09N91
 Company Name:VAN WATERS AND ROGERS
 Address:2256 JUNCTION AVE
 City:SAN JOSE
 State:CA
 ZIP:95131
 Country:US
 Phone:408-435-8700/800-424-9300 (CHEMTREC)
 CAGE:0AN91

----- Composition/Information on Ingredients -----

Ingrid Name:ISOPROPYL ALCOHOL (SARA III) (PER SPEC, MATERIAL IS
 "ISOPROPYL ALCOHOL, N.F." FORMULATION COULD NOT BE FOUND."
 CAS:67-63-0
 RTECS #:NT8050000
 Fraction by Wt: PER N F
 Other REC Limits:NONE DETERMINED
 OSHA PEL:400 PPM/500 STEL
 ACGIH TLV:400 PPM/500STEL;9192

----- Hazards Identification -----

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
 Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
 Health Hazards Acute and Chronic:INHALATION-IRRITATION OF NOSE &
 THROAT. EYES-IRRITATION, CORNEAL BURNS. PROLONGED EXPOSURE TO HIGH
 CONCENTRATIONS MAY CAUSE SEVERE OR FATAL CNS DEPRESSION.
 Explanation of Carcinogenicity:NOT CARCINOGENIC.
 Effects of Overexposure:INHALATION-HIGHER CONCENTRATIONS MAY CAUSE
 HEADACHE, VOMITING, COMA. EVEN HIGHER CONCENTRATIONS MAY CAUSE COMA
 OR DEATH. SKIN-DRYNESS, POSSIBLE DERMATITIS. INGESTION-LARGE
 AMOUNTS CAUSES HEADACHE, NAU SEA, VOMITING, STOMACH CRAMPS,
 UNCONSCIOUSNESS OR DEATH.
 Medical Cond Aggravated by Exposure:PRE-EXISTING SKIN DISORDERS, EYE
 PROBLEMS, OR IMPAIRED RESPIRATORY FUNCTION MAY BE SUSCEPTIBLE.

----- First Aid Measures -----

First Aid:INHALATION: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION
 IF NEEDED, SEEK MEDICAL ATTENTION. EYES: FLUSH WITH WATER FOR 15
 MINUTES, GET MEDICAL ATTENTION. SKIN: WASH AREA WITH SOAP & WATER.
 IF IRRI TATION PERSISTS, SEEK MEDICAL ATTENTION.INGESTION: INDUCE
 VOMITING BY GIVING WATER, PREVENT ASPIRATION, GET IMMEDIATE MEDICAL
 ATTENTION.

----- Fire Fighting Measures -----

Flash Point Method:TCC
 Flash Point:53.0F,11.7C
 Lower Limits:2.0
 Upper Limits:12.7
 Extinguishing Media:WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE, ALCOHOL
 FOAM; DO NOT USE DIRECT WATER SPRAY.
 Fire Fighting Procedures:FIREFIGHTERS SHOULD WEAR SELF-CONTAINED
 BREATHING APPARATUS & FULL PROTECTIVE CLOTHING. USE WATER SPRAY TO
 COOL NEARBY CONTAINERS & STRUCTURES THAT ARE EXPOSED.
 Unusual Fire/Explosion Hazard:EXTINGUISH ALL NEARBY SOURCES OF IGNITION
 BECAUSE VAPORS MAY BE MOVED BY AIR CURRENTS TO IGNITION SOURCES
 DISTANT FROM THE HANDLING POINT.

----- Accidental Release Measures -----

Spill Release Procedures:EXTINGUISH ALL IGNITION SOURCES. MAKE SURE ALL
 HANDLING EQUIPMENT IS ELECTRICALLY GROUNDED. FOR SMALL SPILLS MOP
 UP & PLACE IN D.O.T. APPROVED CONTAINERS.

----- Handling and Storage -----

Handling and Storage Precautions:KEEP AWAY FROM HEAT, SPARKS & OPEN
 FLAMES. STORE IN COOL, DRY, WELL-VENTILATED PLACE AWAY FROM
 INCOMPATIBLE MATERAILS. VENT CONTAINERS FREQUENTLY.
 Other Precautions:MORE OFTEN IN WARM WEATHER, USE ONLY ON NON-SPARKING
 TOOLS AND ELECTRICALLY GROUND ALL EQUIPMENT WHEN HANDLING THIS
 PRODUCT. DO NOT USE PRESSURE TO EMPTY CONTAINERS. EMPTY CONTAINERS
 CAN HAVE RESIDUES , GASES & MISTS.

----- Exposure Controls/Personal Protection -----

Respiratory Protection:BASED UPON CONTAMINATION LEVELS IN THE WORK
 PLACE. FOR EXAMPLE: HALF MASK AIR-PURIFYING CARTRIDGE RESPIRATORS

OR SUPPLIED AIR RESPIRATORS.
Ventilation:LOCAL-MECHNAICAL EXHAUST.
Protective Gloves:RUBBER GLOVES.
Eye Protection:SAFETY GOGGLES.
Other Protective Equipment:RUBBER APRON, RUBBER BOOTS, IMPERVIOUS CLOTHING.
Work Hygienic Practices:EYE WASH FOUNTAIN, QUICK DRENCH SHOWER.
Supplemental Safety and Health
AN MSDS WAS REQUESTED. CHEM COMMODITIES INFORMED US 12OCT94 THAT THEY HAD SUPPLIED VAN WATERS & ROGERS MATERIAL TO DPSC. MSDS COPIED FOR ANOTHER VWR WHICH HAD BEEN SUPPLIED BY CHEM COMMODITIES. -- MATERIAL PER SPEC IS "ISOPROPYL ALCOHOL, N.F.". FORMULATION COULD NOT BE FOUND. FORMULA IS THOUGHT TO BE 70%/30% WATER.

----- Physical/Chemical Properties -----

HCC:F2
NRC/State Lic Num:NONE
Boiling Pt:B.P. Text:181F,83C
Melt/Freeze Pt:M.P/F.P Text:-127F,-88C
Vapor Pres:33
Vapor Density:2.07
Spec Gravity:0.79
Evaporation Rate & Reference:3.0 (BUTYL ACETATE=1)
Solubility in Water:100%
Appearance and Odor:MEDICINAL ALCOHOLIC ODOR.

----- Stability and Reactivity Data -----

Stability Indicator/Materials to Avoid:YES
STRONG OXIDIZERS, ALUMINUM, ACETALDEHYDE, CHLORINE, ETHYLENE OXIDE, HYPOCHLOROUS ACID, ALDEHYDES.
Stability Condition to Avoid:HEAT, SPARKS AND OPEN FLAMES.
Hazardous Decomposition Products:MAY LIBERATE CARBON MONOXIDE AND CARBON DIOXIDE.

----- Disposal Considerations -----

Waste Disposal Methods:CONSULT APPROPRIATE FEDERAL, STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN PROPER DISPOSAL PROCEDURES.

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