

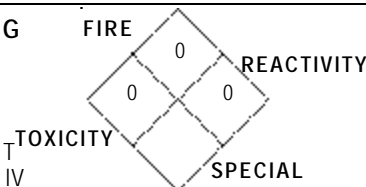


KLEENCO
FOR QUALITY, VALUE AND PERFORMANCE

KLEENCO PRODUCTS, INC.
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For Emergency Assistance
Call Infotrac (800) 535-5053

HAZARD RATING
4 = EXTREME
3 = HIGH
2 = MODERATE
1 = SLIGHT
0 = INSIGNIFICANT
* = SEE SECTION IV



MATERIAL SAFETY DATA SHEET

PRODUCT NAME UNDER-COATER	DATE ISSUED 03-16-93	CODE	DOT HAZARD
	PREPARED BY Dale R. Silbaugh	012-0145	Not Regulated
FORMULA Proprietary	CHEMICAL NAMES AND OR SYNONYMS Compound Cleaning Liquid		

I - COMPOSITIONAL INFORMATION/SARA III INFORMATION

INGREDIENTS	CAS NUMBER	OCCUPATION OSHA PEL	EXPOSURE ACGIH TLV	LIMITS OTHER	VAPOR mm Hg	PRESSURE @ TEMP	WEIGHT PERCENT
*Diethylene Glycol n-Butyl Ether	112-34-5	None	None	35PPM	0.1	77°F	3.0
*Ethylene Glycol	107-21-1	None	50PPM	None	0.1	68°F	2.0
*Dibutyl Phthlate	84-74-2	5MG/M3	5MG/M3	None	0.0	68°F.	3.0

*Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and 40 CFR 342. **NOTE:** The precise composition of this mixture is proprietary. A more complete description will be provided to a physician in the event of a medical emergency.

II - PHYSICAL PROPERTY INFORMATION

APPEARANCE and ODOR Water thin, milky white liquid			
MELTING POINT Not Applicable	BOILING POINT 387° to 635°F.	COATING V.O.C. Not Applicable	EVAPORATION RATE Slower than ether
SOLUBILITY IN WATER Complete	SPECIFIC GRAVITY (Water = 1) 1.0	VAPOR DENSITY Not Applicable	

III - FIRE AND EXPLOSION HAZARD INFORMATION

FLASH POINT Not Applicable	AUTO IGNITION TEMPERATURE Not Available	LOWER EXPLOSION LIMIT (%) Not Applicable	UPPER EXPLOSION LIMIT (%) Not Applicable
EXTINGUISHING MEDIA <input checked="" type="checkbox"/> FOAM <input checked="" type="checkbox"/> CO ₂ <input checked="" type="checkbox"/> DRY CHEMICAL <input checked="" type="checkbox"/> WATER SPRAY <input type="checkbox"/> OTHER			
SPECIAL FIRE FIGHTING PROCEDURES For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire MSDS.			
UNUSUAL FIRE AND EXPLOSION HAZARDS None known			

IV - HEALTH HAZARD INFORMATION

THRESHOLD LIMIT VALUE Not Established	ROUTE(S) OF ENTRY: <input checked="" type="checkbox"/> INHALATION See Health Hazards	<input checked="" type="checkbox"/> SKIN See Health Hazards	<input checked="" type="checkbox"/> INGESTION See Health Hazards
HEALTH HAZARDS (Acute and Chronic) CHRONIC EFFECTS OF EXPOSURE: None known *See Section IX.			
CARCINOGENICITY: Not considered to be a carcinogen <input type="checkbox"/> NTP <input type="checkbox"/> IARC Monographs <input checked="" type="checkbox"/> OSHA Regulated			
SIGNS AND SYMPTOMS OF EXPOSURE INHALATION: Vapors and mist can cause the following: - headache - nausea - irritation of nose, throat, and lungs. EYE CONTACT: Direct contact with the material may irritate the eyes. SKIN CONTACT: Prolonged or repeated contact may irritate the skin.			
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE None Known.			
EMERGENCY AND FIRST AID PROCEDURES EYES: If this chemical contacts the eyes, promptly wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention if any discomfort continues. Contact lenses should not be worn when working with this chemical. SKIN: If this chemical contacts the skin, flush the contaminated skin with water. Where there is evidence of skin irritation, get medical attention. INHALATION: If a person breathes large amounts of this chemical, move the exposed person to fresh air at once. Other measures are usually unnecessary. INGESTION: If this chemical has been swallowed, get medical attention immediately.			

V - REACTIVITY INFORMATION

<input checked="" type="checkbox"/> STABLE	<input type="checkbox"/> UNSTABLE	CONDITIONS TO AVOID ^{None}
HAZARDOUS DECOMPOSITION PRODUCTS ^{May liberate carbon monoxide or carbon dioxide.}		
HAZARDOUS POLYMERIZATION	<input type="checkbox"/> MAY OCCUR	<input checked="" type="checkbox"/> WILL NOT OCCUR
CONDITIONS TO AVOID Heat, sparks and open flame.		
INCOMPATIBILITY (Materials to avoid) ^{Acids, oxidizing materials.}		

VI - SPILL OR LEAK PROCEDURE INFORMATION

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	^{Stop the source of leak or release. Clean up releases as soon as possible, observing precautions in Special Protective Information. Contain liquid to prevent further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.}
WASTE DISPOSAL METHODS	^{Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental authorities for approved disposal of this material.}

VII - SPECIAL PROTECTION INFORMATION

VENTILATION TYPE	^{Local mechanical exhaust ventilation, capable of maintaining emissions at the point of use below the PEL.}
RESPIRATORY PROTECTION	^{Wear a NIOSH-Approved respirator, appropriate for the concentration of vapor or mist encountered at the point of use.}
PROTECTIVE GLOVES	^{Impervious}
EYE PROTECTION	^{Wear eye protection to prevent any reasonable probability of eye contact.}
OTHER PROTECTIVE EQUIPMENT ^{Wear appropriate equipment to prevent any repeated or prolonged skin contact.}	

VIII - STORAGE AND HANDLING INFORMATION

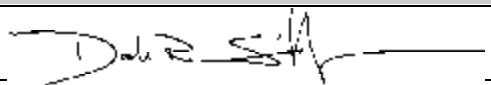
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE	^{Keep out of reach of children. Store in a cool dry place away from incompatible materials. Keep container tightly closed when not in use. Workers should wash immediately when skin becomes contaminated. Work clothing should be changed daily if there is any possibility that the clothing may be contaminated. Remove clothing immediately if it is non-impervious clothing that becomes wet. The following equipment should be available: Eyewash, Quick drench. It is generally recognized that contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of the injury.}
OTHER PRECAUTIONS	^{Read and follow label instructions. The label contains information necessary for the proper use of the product. Containers, even those that have been emptied, will retain product residue and vapors. Always obey hazard warnings and handle empty containers as if they were full.}

IX - TOXICITY INFORMATION

*HEALTH HAZARDS for Ethylene Glycol: INHALATION: At room temperature, vapors are minimal due to low vapor pressure. If heated or sprayed as an aerosol, concentrations may be attained that are sufficient to cause irritation and other effects. EYE CONTACT: May cause slight transient (temporary) eye irritation: Corneal injury is unlikely. Vapors or mists may irritate the eyes. SKIN CONTACT: Essentially non-irritating to the skin. SKIN ABSORPTION: Repeated skin exposure to large quantities may result in absorption of harmful amounts. The dermal LD50 has not been determined. SWALLOWING: Single dose oral toxicity is moderate. Excessive exposure may cause central nervous system effects, cardiopulmonary effects (metabolic acidosis), and kidney failure. The estimated lethal dose for an average person is 100 ml. The oral LD50 for rats is in the 6,000-13,000 mg/kg range. Amounts ingested to incidental to industrial handling are not likely to cause injury; however ingestion of larger amounts could cause serious injury, even death. SYSTEMIC & OTHER EFFECTS: Excessive exposure may cause irritation to upper respiratory tract. Observations in animals include kidney and liver effects and deposition of calcium salts in various tissues after long-term dietary intake of ethylene glycol. Did not cause cancer in long-term animal studies. Based on animal studies, ingestion of ethylene glycol appears to be the major and possibly only route of exposure to produce birth defects. Exposures by inhalation (tested nose-only in animals) or skin contact, the primary routes or occupational exposure, have minimal or essentially no effect on the fetus. Results of mutagenicity tests in animals have been negative.
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X - MISCELLANEOUS INFORMATION

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and the removal of the material from eyes, skin and clothing.

PRODUCT CODE	NA = NOT AVAILABLE	DATE OF ISSUE	SUPERSEDES	SIGNED
012-0145		03-16-93	09-08-88	
The information contained herein is based on data considered accurate. However no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained thereof. They are offered solely for your consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with applicable Federal, State and Local laws and regulations. KLEENCO PRODUCTS, INCORPORATED and its Distributors assume no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material.				