

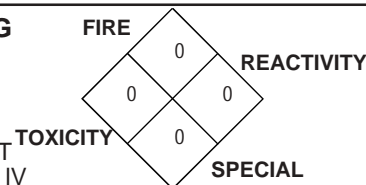


**KLEENCO**<sup>®</sup>  
FOR QUALITY, VALUE AND PERFORMANCE

KLEENCO PRODUCTS, INC.  
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TELEPHONE NUMBER  
Reg. Phone  
206-641-8888  
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 <b>KLEEN-TOUGH</b>	DATE ISSUED 03-05-93	CODE 008-0076	DOT HAZARD Not Regulated
	PREPARED BY Dale R. Silbaugh		
FORMULA Proprietary	CHEMICAL NAMES AND OR SYNONYMS Compound Cleaning Liquid		

### I - COMPOSITIONAL INFORMATION/SARA III INFORMATION

INGREDIENTS	CAS NUMBER	OCCUPATION EXPOSURE LIMITS			VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
		OSHA PEL	ACGIH TLV	OTHER		
Trippropylene Glycol Methyl Ether *Diethylene Glycol n-Butyl Ether	25498-49-1 112-34-5	None None	None None	None 35 PPM	0.0 68° F. 0.1 77° F.	9.0

\*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 Slightly viscous, clear brown/tan liquid with low odor.			
MELTING POINT Not Applicable	BOILING POINT 340° to 642°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 115°F. (TCC)	AUTO IGNITION TEMPERATURE Not Available	LOWER EXPLOSION LIMIT (%) 0.7	UPPER EXPLOSION LIMIT (%) 24.6
EXTINGUISHING MEDIA <input checked="" type="checkbox"/> FOAM <input checked="" type="checkbox"/> CO <sub>2</sub> <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 promptly when skin becomes wet. The following equipment should be available: Eyewash. 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.	

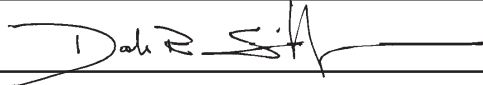
## IX - TOXICITY INFORMATION

\*HEALTH HAZARDS for Tripropylene Glycol Methyl Ether: INHALATION: Anesthetic or narcotic effects may occur with gross overexposure. See also chronic effects below. EYE CONTACT: Liquid and mist may irritate the eyes. SKIN CONTACT: No irritation is likely after brief contact but may be irritating after prolonged contact. May be absorbed through the skin in toxic amounts if exposure is repeated or prolonged. SWALLOWED: Low single dose toxicity. CHRONIC EFFECTS OF EXPOSURE: Prolonged or repeated exposure to high concentrations may cause kidney and neural dysfunction. MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None reported.

\*HEALTH HAZARDS for Diethylene Glycol n-Butyl Ether: INHALATION: Inhalation of vapor may cause respiratory tract irritation, and central nervous system effects including headache, narcosis, weakness, slurred speech and blurred vision. EYE CONTACT: May cause moderate to severe irritation and moderated transient corneal injury depending on the concentration. SKIN CONTACT: May cause slight irritation. This material can be absorbed through the skin in acutely toxic amounts. SWALLOWED: May cause irritation of the gastrointestinal tract and central nervous system disturbances. CHRONIC EFFECTS OF EXPOSURE: Repeated inhalation and ingestion can lead to central nervous system and gastrointestinal disturbances.

## 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.	
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PRODUCT CODE	NA = NOT AVAILABLE	DATE OF ISSUE	SUPERSEDES	SIGNED
008-0076		03-05-93	11-28-91	
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