

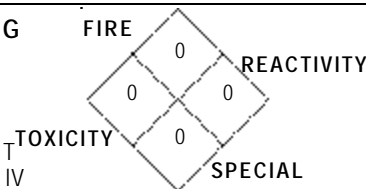


**KLEENCO**  
FOR QUALITY, VALUE AND PERFORMANCE

KLEENCO PRODUCTS, INC.  
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TELEPHONE NUMBER  
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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>LIQUID FORMULA "K"</b>	DATE ISSUED 02-26-93	CODE 005-0310	DOT HAZARD Not Regulated
FORMULA Proprietary	CHEMICAL NAMES AND OR SYNONYMS Compound Cleaning Liquid	PREPARED BY Dale R. Silbaugh	

## I - COMPOSITIONAL INFORMATION/SARA III INFORMATION

INGREDIENTS	CAS NUMBER	OCCUPATION OSHA PEL	EXPOUSURE ACGIH TLV	LIMITS OTHER	VAPOR mm Hg	PRESSURE @ TEMP	WEIGHT PERCENT
Propylene Glycol Methyl Ether	107-98-2	None	100 PPM	None	12.5	68°F.	

No 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, clear blue liquid.			
MELTING POINT Not Applicable	BOILING POINT 348°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 (%) 1.6%	UPPER EXPLOSION LIMIT (%) 18.8%
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

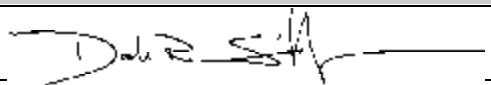
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE	Keep out of reach of children. Store in a cool dry place away from incompatible materials. Keep container tightly closed when not in use. Workers should wash promptly when skin becomes wet. The following equipment should be available: Eyewash. It is generally 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 Propylene Glycol Methyl Ether: INHALATION: The odor is objectionable at 100 PPM; higher levels produce eye, nose, and throat irritation and are intolerable at 1000 PPM. Anesthetic effects are seen at or above 1000 PPM. EYE CONTACT: May cause slight transient (temporary) eye irritation. Corneal injury is unlikely. SKIN CONTACT: Prolonged or repeated exposure may cause skin irritation. SKIN ABSORPTION: The LD50 for skin absorption in rabbits is approximately 12 ml/kg. Prolonged skin contact with very large amounts may cause drowsiness. SWALLOWING: Single dose oral toxicity is low. The oral LD50 for rats is 6.6 ml/kg. Small amounts ingested incidental to normal handling operations are not likely to cause injury. Swallowing amounts larger than that may cause injury. SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Observations in animals include liver and kidney effects. Signs and symptoms of excessive exposure may be anesthetic or narcotic effects.
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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.
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PRODUCT CODE 005-0310	NA = NOT AVAILABLE 02-26-93	DATE OF ISSUE	SUPERSEDES	SIGNED 
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.				