

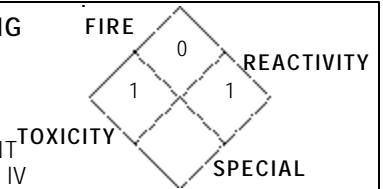


**KLEENCO**  
FOR QUALITY, VALUE AND PERFORMANCE

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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>LINENTECH OPTICHLOR</b>	DATE ISSUED 04-12-93	CODE	DOT HAZARD
	PREPARED BY Dale R. Silbaugh	025-0088	Corrosive UN-1791
FORMULA Proprietary	CHEMICAL NAMES AND OR SYNONYMS Compound Cleaning Liquid		

## I-COMPOSITIONAL INFORMATION/SARA III INFORMATION

INGREDIENTS	CAS NUMBER	OCCUPATION OSHA PEL	EXPOUSURE ACGIH TLV	LIMITS OTHER	VAPOR mm Hg	PRESSURE @ TEMP	WEIGHT PERCENT
Sodium Hypochlorite	Mixture	None	None	None	0.9	125°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, yellow-green liquid with a chlorine odor.			
MELTING POINT Not Applicable	BOILING POINT 219°F.	COATING V.O.C. Not Applicable	EVAPORATION RATE Slower than ether
SOLUBILITY IN WATER Complete	SPECIFIC GRAVITY (Water = 1) 1.2	VAPOR DENSITY Not Applicable	

## III - FIRE AND EXPLOSION HAZARD INFORMATION

FLASH POINT Not Applicable	AUTO IGNITION TEMPERATURE Not Applicable	LOWER EXPLOSION LIMIT (%) Not Applicable	UPPER EXPLOSION LIMIT (%) Not Applicable
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 Use National Institute of Occupational Safety & Health (NIOSH) approved respirator with acid type canister or use self-contained breathing apparatus. Read the entire MSDS.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Material is a strong oxidizer. Contact with combustibles may initiate or promote combustion. Acid and heat accelerate decomposition. Decomposition products may include chlorine.			

## 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: EYE: Can cause damage. SKIN: Can cause damage, chemical burns.			
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: Fumes from spill are very irritating to mucous membranes. Very little hazard from properly stored solution. EYE CONTACT: Severe irritant; corrosive. SKIN CONTACT: Severe irritant, reddening of skin, skin damage. SKIN ABSORPTION: Same as skin contact. SWALLOWED: Causes irritation of membranes of the mouth, throat, and stomach pain and possible ulceration. LD50 (oral, rat) for 12.5% NaOCl is approximately 5 g/kg body weight.			
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE None reported			
EMERGENCY AND FIRST AID PROCEDURES EYES: If this chemical contacts the eyes, immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately. Contact lenses should not be worn when working with this chemical. SKIN: If this chemical contacts the skin, immediately flush the contaminated skin with water. If this chemical penetrates the clothing, immediately remove the clothing and flush the skin with water. Get medical attention promptly. INHALATION: If a person breathes large amounts of this chemical, move the exposed person to fresh air at once. Call a physician if exposure is severe. 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 Solutions are fairly stable in concentrations below 10%. Stability decreases with concentration, heat, light, exposure, decreases in pH, and contamination with heavy metals, such as nickel, cobalt, copper, and iron.	
HAZARDOUS DECOMPOSITION PRODUCTS Hypochlorous Acid (HOCL), chlorine, hydrochloric acid. Composition depends upon temperature and decrease in pH. Additional decomposition products, which depend upon pH, temperature and time, are sodium chloride, sodium chlorate and oxygen.			
HAZARDOUS POLYMERIZATION	<input type="checkbox"/> MAY OCCUR	<input checked="" type="checkbox"/> WILL NOT OCCUR	CONDITIONS TO AVOID NotApplicable
INCOMPATIBILITY (Materials to avoid) Acids, alcohols, amines, ammonia, chlorinated isocyanurates, combustibles, cyanides, detergents, ethers, hydrocarbons, oxidizable materials, reducing agents. Corrosive to most metals.			

## 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 possibility of eye contact.
OTHER PROTECTIVE EQUIPMENT Wear appropriate equipment to prevent any possibility of skin contact.			

## VIII - STORAGE AND HANDLING INFORMATION

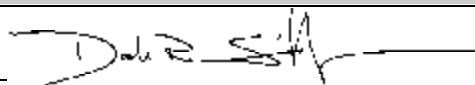
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE Keep out of reach of children. Store in a cool dry place away from incompatible materials. Keep container tightly closed when not in use. Workers should wash immediately when skin becomes contaminated. Work clothing should be changed daily if it is reasonably probable that the clothing may be contaminated. Remove clothing immediately if it is non-impervious clothing that becomes contaminated. The following equipment should be provided: 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

On the basis of available information this material does not appear to possess any toxicological properties which would require special handling other than good industrial hygiene and safety practices employed with any industrial chemical.
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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 025-0088	NA = NOT AVAILABLE	DATE OF ISSUE 04-12-93	SUPERSEDES Any previous MSDS	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.				