



MATERIAL SAFETY DATA SHEET

Opti-Mate Heavy Duty Cleaner Liquid

PCN(s):00164

Publication Date: 2/26/09

REV: A

1. SUPPLIER AND EMERGENCY INFORMATION Emergency Phone Numbers:

L&R Manufacturing Company
577 Elm Street, P.O. Box 607
Kearny, NJ 07032 - 0607 USA

Product Information
Call: **201-991-5330**
www.lrultrasonics.com

For emergencies involving a spill, leak,
fire or accident contact:
CHEMTREC - 800-424-9300
within the United States or (01)**703-527-3887** [USA] for
International collect calls

2. HAZARDS IDENTIFICATION

Physical appearance and odor: Clear liquid

A: Warning Statement:

CORROSIVE LIQUID Good industrial hygiene practices should be used when handling this material.

Acute Eyes: Direct contact causes severe damage to the eyes.

Acute Skin: Irritating to the skin, may cause skin sensitivity.

Acute Inhalation: Will cause irritation to the respiratory system.

Acute Ingestion: Will cause damage to mucus membranes, and other tissue. Ingestion of large quantities may be fatal.

B: POTENTIAL HEALTH EFFECTS:

Chronic Effects: This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Percentage
WATER	7732-18-5	60 - 80
Potassium Hydroxide	1310-58-3	35 - 45
NJ TRADE SECRET REGISTRY NUMBER	12777-5012-P	1 - 10

4. FIRST AID MEASURES

Eye Exposure: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

Skin Exposure: Wash thoroughly with water. If irritation or redness develops, seek medical attention.

Inhalation: If respiratory irritation or distress occurs, move victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

Ingestion: Seek immediate medical attention. DO NOT INDUCE VOMITING.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate existing skin disease.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA:

FLASH POINT: None to boiling **METHOD USED:** Tag Closed Cup

Flammability limits (vol/vol %): Lower: No Data Upper: No Data

Suitable Extinguishing Media: Extinguish with dry chemical, CO₂ or a BC/ABC extinguisher.

Special Fire Fighting Procedures: None known

Unusual Fire and Explosion Hazards: Closed containers may explode due to build up of pressure when exposed to extreme heat.

Hazardous Decomposition Materials: under fire conditions: Oxides of carbon

6. ACCIDENTAL RELEASE MEASURES:

Cleanup and Disposal of Spill: Mop up spill and dispose of by dilution to a sanitary sewer system as permitted by local, state and federal regulations.

Environmental and Regulatory Reporting: Not required

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures: 40 to 100^oF. Protect from freezing, Freezing will NOT damage the product. Product may be thawed and then mixed to assure homogeneity.

HANDLING: AVOID CONTACT WITH SKIN, EYES OR CLOTHING

8. EXPOSURE CONTROL/PERSONAL PROTECTION

General: These recommendations provide general guidance for handling of this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. When developing safe handling procedures, do not overlook the need to clean and dispose of the material. Waste resulting from the use of this product should be handled in accordance with Section 13: Disposal Considerations.

Exposure Guidelines: Exposure limits are recommended worker breathing limits. The following limits apply to this material:

INGREDIENTS

Water
NJTSRN# 012777-5012-P

LIMITS

None established
None established

INGREDIENTS

Potassium Hydroxide

LIMITS

2 mg/m³ NIOSH / REL

Engineering Controls: Normal room ventilation.

Respiratory Controls: For reasonable uses of this material, respiratory protection should not be necessary.
Eye/Face Protection: Safety glasses to protect from splashing.
Skin Protection: Rubber or plastic gloves to avoid drying and irritation to the skin.
Work Practice Control: Normal hygiene in the work area should be taken when working with or handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear liquid. **Color:** White **Odor:** Characteristic odor.
pH: > 13 as concentrate **Specific Gravity:** 1.41 **Odor Threshold:** Not available
Water Solubility: Soluble **Melting Point Range:** Not available **Evaporation Rate:** Not available
Freezing Point Range: < 32 ° F **Boiling Point:** Not Established. **Partition Coefficient; n-octanol / water:** Not available
Vapor Pressure: Not established **Vapor Density:** Not established **Decomposition Temperature:** Not available
Flash Point: None to boiling **Method:** Tag Closed Cup **Auto Ignition Temperature:** Not available
Flammability limits (vol/vol %): Lower: No Data **Upper:** No Data
Percent volatile by volume: Approx. 62 % by volume **V.O.C. (calculated):** Less than 5 grams / l.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to be avoided: Keep away from heat
Materials/Chemicals to be avoided: Strong acids, strong oxidizing agents, aluminum, magnesium, zinc
Decomposition Type: Thermal Oxides of carbon
Possibility of Hazardous Reactions: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation: Irritating to eyes.
Acute Skin Irritation: Irritating to Skin.
Acute Dermal Toxicity: No test data found for product.
Acute Respiratory Irritation: No test data found for product.
Acute Inhalation Toxicity: No test data found for product.
Acute Oral Toxicity:
LD50 (rat) = LD50 (rat) = 273 mg/kg

Chronic Toxicity: This product does not contain any substances that are considered by OSHA, NTP, IARC OR ACGIH to be a probable or suspected human carcinogen. No additional test data was found for this product.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data found.

13. DISPOSAL CONSIDERATIONS

This product is biodegradable and can be disposed in sanitary sewer system, with dilution, where permitted by local, federal and state regulations.

14. TRANSPORTATION INFORMATION

Domestic: Compounds, Cleaning Liquid.(Contains Potassium Hydroxide), Class 8, NA 1760 , PG II.
Export and Air: Corrosive Liquid, basic, inorganic, n.o.s. (Contains Potassium Hydroxide) UN3266 Class 8 PG II .

15. REGULATORY INFORMATION

Inventory Issues: All components of this product are listed on the U.S. TSCA, Canadian DSL, European EINECS/ELINS chemical listings

16. OTHER INFORMATION

National Fire Protection Association

Hazard Rating, NFPA	Health	Flammability	Reactivity	Special
	3	0	0	--

MSDS CHANGES

<u>REV</u>	<u>DATE</u>	<u>DESCRIPTION OF CHANGE</u>
A	10/7/08	Improved Formula

Disclaimer: The information herein is given in good faith but no warranty expressed or implied is made.

Prepared By: L&R Manufacturing Company
Product Name: Opti-Mate Heavy Duty Cleaning Liquid

Date: 2/26/09