1. Identification of Substance and Manufacturer:
UltraDose Ultrasonic Cleaning Solution PCN: 012
Use: Ultrasonic Cleaning Solution, diluted as per instructions
Manufacturer : L&R Manufacturing Company, 577 Elm Street, P.O. Box 607 Kearny, NJ 07032-0607 USA.
Publication Date: 05/09/2018
Product information call 201-991-5330 www.lrultrasonics.com
For emergencies involving a spill, leak fire or accident contact CHEMTEL 800-255-3924 within the United States. Or 1-813-248-0585 for International calls.

2. HAZARDS IDENTIFICATION

Warning! Irritant. May be harmful if swallowed.

A: Warning Statement:
Good industrial hygiene practices should be used when handling this material.
Acute Eyes: Direct contact causes irritation, redness and possible tearing.
Acute Skin: Prolonged or repeated contact causes redness, and drying of the skin.
Acute Inhalation: Breathing high concentrations of vapors or mists may cause irritation to the nose and drowsiness.
Acute Ingestion: Will cause irritation to the digestive tract and signs of nervous system depression.

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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>35 - 45</td>
</tr>
<tr>
<td>Sodium Tetraborate</td>
<td>1303-96-4</td>
<td>1 - 2</td>
</tr>
<tr>
<td>Dodecyl mercaptan, ethoxylated</td>
<td>9004-83-5</td>
<td>1 – 5</td>
</tr>
<tr>
<td>Dipropylene Glycol Methyl Ether</td>
<td>34590-94-8</td>
<td>10 – 20</td>
</tr>
<tr>
<td>Nonyl Phenoxo Ethyleneoxy Ethanol</td>
<td>9016-45-9</td>
<td>1 – 10</td>
</tr>
<tr>
<td>Ethoxylated,Propoxylated C8- C10 Alcohols</td>
<td>68603-25-8</td>
<td>1 – 2</td>
</tr>
<tr>
<td>Surfactant</td>
<td>68608-65-1</td>
<td>25 – 35</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>0.4-1.0</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>0.2-1.0</td>
</tr>
</tbody>
</table>

The exact concentration and composition has been withheld as a trade secret.

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. INDUCE VOMITING AS DIRECTED BY MEDICAL PERSONNEL.
MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate existing skin disease.

5. FIRE FIGHTING MEASURES

FIRE HAZARD 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: Product will burn under fire conditions. Closed containers may explode due to build pressure when exposed to extreme heat.

Hazardous Decomposition Materials: (under fire conditions) Oxides of nitrogen, carbon and sulfur.

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: 39 to 100°F Protect from freezing
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.
9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Clear Liquid

**pH:** 9.6

**Water Solubility:** Soluble

**Freezing Point Range:** 6°F

**Vapor Pressure:** Not established

**Flash Point:** None

**Auto Ignition Temperature:** Not available

**Percent volatile by volume:** Approximately 60% by volume

**V.O.C. (calculated):** Concentrate: 1.71 lbs./gal or 204.9 grams/L. Diluted as directed: 0.015 lbs/gal or .6 g/l.

10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable

**Conditions to be avoided:** Heat open flame

**Materials/Chemicals to be avoided:** Strong acids and oxidizing agents.

**Decomposition Type:** Thermal

**Oxides of carbon, nitrogen and sulfur.**

**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) = 3.0 gm / kg for Dodecyl mercaptan, ethoxylated, LD₅₀ (rat) > 5000mg/kg for “Surfactant”

LD₅₀ (rat) = 2660 mg / kg for sodium tetraborate LD₅₀ (rat) = 4 gm / kg for Nonyl Phenox Ethyleneoxy Ethanol

LD₅₀ (rat) = 2400 mg/kg Ethoxylated C₈-10 alcohols Dipropylene Glycol Methyl Ether LD₅₀= 5130 mg/kg

LD₅₀ (rat) = 5045 00 mg/kg Isopropyl Alcohol LD₅₀ (rat) = 4090 mg/kg for Sodium Hydroxide

**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 can be disposed in sanitary sewer system, where permitted by local, federal and state regulations.

14. TRANSPORTATION INFORMATION

This product is not regulated for transportation. Product is not regulated for international air shipments (IATA.) Do not stack cartons more than five high.

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**

<table>
<thead>
<tr>
<th>Hazard Rating, NFPA</th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>--</td>
</tr>
</tbody>
</table>

**SDS CHANGES**

<table>
<thead>
<tr>
<th>REV</th>
<th>DATE</th>
<th>DESCRIPTION OF CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>05/09/2018</td>
<td>Change in Emergency Contact</td>
</tr>
</tbody>
</table>

Disclaimer: The information herein is given in good faith but no warranty expressed or implied is made. This SDS has been prepared by L&R Manufacturing Company.