



MATERIAL SAFETY DATA SHEET

ELLANAR DIP

PCN(s) 173, 175, 210

Publication Date: 8/16/11

REV: G

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 with white precipitate and sulfur like odor.

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 throat.

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 carcinogen.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS Number | Percentage |
|--------------------|------------|------------|
| Water | 7732-18-5 | 81-91 |
| Thiourea | 062-56-6 | 5 - 8 |
| Sulfuric Acid | 7664-93-9 | 1 - 2 |
| Anionic Surfactant | 126-92-8 | 0.1 - 1 |

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, give large quantities of water.

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

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA: NOT COMBUSTIBLE

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

Special Fire Fighting Procedures: None known

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

Hazardous Decomposition Materials: (under fire conditions) None known..

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.

Regulatory Reporting: Not required

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures: 40 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.

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

| <u>INGREDIENTS</u> | <u>LIMITS</u> | <u>INGREDIENTS</u> | <u>LIMITS</u> |
|--------------------|-----------------------------------|--------------------|-------------------|
| Thiourea | Ingestion may cause sensitization | Sulfuric Acid | 1 mg/M3 ACGIH TWA |
| Anionic Surfactant | None established | | |

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 with white precipitate **Color:** Water White **Odor:** Sulfur like odor
pH: 1.4 **Specific Gravity:** 1.1 **Odor Threshold:** Not available
Water Solubility: Soluble **Melting Point Range:** Not available **Evaporation Rate:** Not Applicable
Freezing Point Range: < 32°F **Boiling Point:** Approx. 212 degrees °F **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: 90% by Volume **V.O.C. (calculated):** < 5gm/l.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to be avoided: Protect from freezing.
Materials/Chemicals to be avoided: Strong bases, oxidizing agents, monel, steel, iron, aluminum, porous surfaces and antiqued finish silver.
Decomposition Type: Thermal: Oxides of carbon, hydrogen and sulfur
Possibility of Hazardous Reactions: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation: Irritating to eyes.
Acute Skin Irritation: May cause irritation to the skin.
Acute Dermal Toxicity: No test data found for product.
Acute Respiratory Irritation: No test data found for product.
Acute Inhalation Toxicity: May cause nose and throat irritation.
Acute Oral Toxicity: LD50 (rat) = 1750 mg/kg For Thiourea
LD50 (rat) = 2140 mg/kg For Sulfuric Acid
LD50 (rat) = 4 gm/kg For Anionic Surfactant
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, with dilution, where permitted by local, federal and state regulations.

14. TRANSPORTATION INFORMATION

Classified as ORM-D for domestic transportation. For export: Corrosive Liquid Inorganic n.o.s. (contains Sulfuric Acid), Un 3264, Class8, PG III. This product can not be shipped by air. 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

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

MSDS CHANGES

| <u>REV</u> | <u>DATE</u> | <u>DESCRIPTION OF CHANGE</u> |
|------------|-------------|--|
| F | 8/9/07 | Reviewed/ changed to ANSI Z400.1-2004 format |
| G | 8/16/11 | Reviewed/Updated |

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: ELLANAR DIP

Date: 8/16/11