SAFETY DATA SHEETS

This SDS packet was issued with item:

074751806

N/A

MATERIAL SAFETY DATA SHEET
ULTRADOSE TARTAR AND LIGHT STAIN REMOVER

PCN(s): 028 Publication Date: 4/25/2013 REV: I

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: White free flowing powder, odorless.

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: Not known, but expected to cause nausea and diarrhea.
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
Citric Acid	77 -92 -9	80 - 85
Fumaric Acid	110 -17 -8	10 -15
Dodecybenzene Sulfonate, Sodium Salt	25155-30-0	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: Non-Combustible
Suitable Extinguishing Media: Extinguish surrounding area with dry chemical, CO_2 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) May release sulfur dioxide and trioxide or ammonia gas.

6. ACCIDENTAL RELEASE MEASURES:

Cleanup and Disposal of Spill: Sweep up powder, avoid breathing dust. Residual powder may be washed with water. Dispose of in accord with Federal, State and Local regulations.
Environmental and Regulatory Reporting: Not required

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures: 32 to 100^{O} F Protect from moisture and sunlight..
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	LIMITS	INGREDIENTS	LIMITS
Citric Acid	Generally recognized as safe	Fumaric Acid	Generally recognized as safe
Sodium dodecylbenzene sulfonate	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: Free Flowing Powder **Color:** White **Odor:** odorless
pH: 2.0 as diluted **Specific Gravity:** Not available **Odor Threshold:** Not available
Water Solubility: Soluble **Melting Point Range:** Not available **Evaporation Rate:** Not available
Freezing Point Range: Not applicable **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 **Method:** Tag Closed Cup **Auto Ignition Temperature:** Not available
Flammability limits (vol/vol %): Lower: No Data **Upper**: No Data
Percent volatile by volume: Less than 1% by volume **V.O.C. (calculated):** Less than 5 grams / l**.**

10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to be avoided: Moisture and sunlight
Materials/Chemicals to be avoided: Strong bases , nitrites , nitrates , chlorates, chlorine, hypochlorite, cyanides and sukfides
Decomposition Type: Thermal May release sulfur dioxide, sulfur trioxide or ammonia gases.
Possibility of Hazardous Reactions: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation: Irritating to eyes.
Acute Skin Irritation: May cause irritation to Skin.
Acute Dermal Toxicity: No test data found for product.
Acute Respiratory Irritation: May cause nose and throat irritation..
Acute Oral Toxicity:
LD50 (rat) = Citric Acid = 3 gm / kg.
Fumaric Acid = 10,700 mg / kg
Sodium dodecylbenzene sulfonate = 438 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 can be disposed in sanitary sewer system, with dilution, where permitted by local, federal and state regulations.

14. TRANSPORTATION INFORMATION

This product is not regulated for transportation. 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
	2	0	0	--

MSDS CHANGES

REV	DATE	DESCRIPTION OF CHANGE
H	8/17/11	Reviewed/Updated
I	4/25/2013	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 Date: 4/25/2013
Product Name: **ULTRADOSE TARTAR AND LIGHT STAIN REMOVER**

SAFETY DATA SHEET

1. Identification of Substance and Manufacturer:
ULTRADOSE TARTAR AND LIGHT STAIN REMOVER PCN 028
Use: Ultrasonic Cleaning Solution. Dilute per instructions.
Manufacturer: L&R Manufacturing Company, 577 Elm Street, P.O. Box 607, Kearny NJ 07032-0607 USA Publication Date: 05/07/2018 Rev:L
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.

1. HAZARDS IDENTIFICATION

WARNING! IRRITANT! MAY BE HARMFUL IF SWALLOWED.

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: Not known, but expected to cause nausea and diarrhea.
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.
Do not use directly in an ultrasonic tank.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Percentage
Citric Acid	77 -92 -9	80 - 85
Fumaric Acid	110 -17 -8	10 -15
Dodecybenzene Sulfonate, Sodium Salt	25155-30-0	1 – 10

The exact concentration of 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. DO NOT INDUCE VOMITING.
MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate existing skin disease.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA: Non-Combustible
Suitable Extinguishing Media: Extinguish surrounding area with dry chemical, CO_2 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) May release sulfur dioxide and trioxide or ammonia gas.

6. ACCIDENTAL RELEASE MEASURES

Cleanup and Disposal of Spill: Sweep up powder, avoid breathing dust. Residual powder may be washed with water. Dispose of in accord with Federal, State and Local regulations. Product may be neutralize with baking powder.
Environmental and Regulatory Reporting: Not required

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures: 32 to 100^{o} F Protect from moisture and sunlight.
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	LIMITS	INGREDIENTS	LIMITS
Citric Acid	OSHA PEL 5 mg/m	Fumaric Acid	DNEL 2100 mg.m3 (long term Systematic effect inhalation

Sodium dodecylbenzene sulfonate (for Dodecy benzensulfonic Acid TWA 1 mg/m3 ACGIH (TLV)
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: Free Flowing Powder **Color:** White **Odor:** odorless
pH: 2.0 as diluted **Specific Gravity:** Not available **Odor Threshold:** Not available
Water Solubility: Soluble **Melting Point Range:** Not available **Evaporation Rate:** Not available
Freezing Point Range: Not applicable **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 **Method:** Tag Closed Cup **Auto Ignition Temperature:** Not available **Viscosity:** not applicable, solid
Flammability limits (vol/vol %): Lower: No Data **Upper**: No Data Evaporation rate: Not available
Percent volatile by volume: Less than 1% by volume **V.O.C. (calculated):** Less than 5 grams / l**.**

10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to be avoided: Moisture and sunlight
Materials/Chemicals to be avoided: Strong bases, nitrites, nitrates, chlorates, chlorine, hypochlorite, cyanides and sulfides
Decomposition Type: Thermal May release sulfur dioxide, sulfur trioxide or ammonia gases.
Possibility of Hazardous Reactions: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation: Irritating to eyes.
Acute Skin Irritation: May cause irritation to Skin.
Acute Dermal Toxicity: No test data found for product.
Acute Respiratory Irritation: May cause nose and throat irritation.
Acute Oral Toxicity:
LD50 (rat) = Citric Acid = 3 gm / kg.
Fumaric Acid = 10,700 mg / kg
Sodium dodecylbenzene sulfonate = 1650 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 can be disposed in sanitary sewer system, with dilution, where permitted by local, federal and state regulations. Product can be neutralized with baking powder/baking soda.

14. TRANSPORTATION INFORMATION

This product is not regulated for D.O.T. shipping. 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
	2	0	0	--

SDS CHANGES

REV	DATE	DESCRIPTION OF CHANGE
L	**05/07/2018**	**Emergency Contact Change**

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.