



SAFETY DATA SHEET

1. Identification of Substance and Manufacturer:

SF-1 Solvent Free Degreaser Concentrate PCN: 140, 221

Use Ultrasonic leaner, degreaser. Dilute as per instructions. Recommended dilution 1 part to 7 parts of water.

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

Publication Date 9/18/2014 Rev. L

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. SUPPLIER AND EMERGENCY

2. 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. Use good ventilation to minimize exposure.

Acute Skin: Prolonged or repeated contact causes redness, and drying of the skin.

Acute Inhalation: Breathing high concentrations of vapors or mists will cause irritation to the respiratory tract.

Acute Ingestion: 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	Component
Water		7732-18-5	70 - 90
Sodium Metasilicate		6834-92-0	1 - 5
Sodium Xylene Sulfonate, solution		1300 -72 -7	2 - 12
Ethoxylated Propoxylated Alcohols		68603-25- 8	0.3 - 3
Tetrasodium EDTA Hydrate		64-02-8	0.2-1.2
Nonionic Alkyl Polyglucoside		68515-73-1	0.3-0.8
Polyethoxylated tert-dodecyl mercaptan		9004-83-5	0.1-0.3

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:

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

Hazardous Decomposition Materials: (under fire conditions) Oxides of nitrogen and 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

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>
Water	None established	Ethoxylated Propoxylated Alcohol	None established
Sodium Xylene Sulfonate, solution	None established	Alkyl Polyglucoside	None established
Sodium Metasilicate	OSHA 15 mg/m3 TWA	Tetrasodium EDTA Hydrate	OSHA PEL 2mg/m3
Polyethoxylated tert-dodecyl mercaptan	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.

pH: 12.4 as concentrate, 11.9 at 20% by volume

Water Solubility: Soluble

Freezing Point Range: Approx. 30 ° F

Vapor Pressure: Not established

Flash Point: None to boiling **Method:** Tag Closed Cup

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

Percent volatile by volume: Approx. 84 % by volume **V.O.C. (calculated):** Less than 5.0 grams / l. **Diluted Use:** Less than 0.63 grams per l.

Color: Green

Specific Gravity: 1.05

Melting Point Range: Not available

Boiling Point: approx. 212 ° F.

Vapor Density: Not established

Odor: Mild odor.

Odor Threshold: Not available

Evaporation Rate: Not available

Partition Coefficient; n-octanol / water: Not available

Decomposition Temperature: Not available

Auto Ignition Temperature: Not available

Evaporation: Slow, similar to water

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to be avoided: Heat, open flame.

Materials/Chemicals to be avoided: Strong acids, strong oxidizing agents, magnesium, and zinc

Decomposition Type: Thermal Oxides of carbon and ammonia vapor

Possibility of Hazardous Reactions: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation: Irritating to eyes.

Acute Skin Irritation: No test data found for product.

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) = 800 mg. /kg for Sodium Metasilicate

LD50 (mouse) = 5969 mg/kg for Sodium Xylene Sulfonate

LD50 (rat) = 3100 mg/kg for Tetrasodium EDTA Hydrate

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.

LD50 (rat) = 5000 mg / kg for Nonionic Alkyl Polyglucoside

LD50 (rat) = 2400 mg / kg for Ethoxylated Propoxylated Alcohol

LD50 (rat) = 3.3ml/ kg for Polyethoxylated tert-dodecyl mercaptan

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 D.O.T. IATA or Air 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

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MSDS CHANGES

REV

K

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DATE

3/20/13

9/18/14

DESCRIPTION OF CHANGE

Formula Update

Safety Data Sheet format

Disclaimer: The information herein is given in good faith but no warranty expressed or implied is made. This SF 1 Concentrate SDS has been prepared by L&R Manufacturing Company.