

MSDS - Material Safety Data Sheet**Product Name: LIQUID WRENCH FOAMING PENETRANT & LUBRICANT L4**

MSDS No.: L412

I. Basic Information:**Manufacturer:** RADIATOR SPECIALTY COMPANY**Contact:** Robert Geer**Address:** 600 RADIATOR ROAD**Information Telephone Number:** 704-684--181 1**City, ST Zip:** INDIAN TRAIL, NC 28079**Emergency Contact:** Rocky Mountain Poison Control Center**Country:****Emergency Telephone Number:** 303-623-5716**Emergency Restrictions:****Product Name:** LIQUID WRENCH FOAMING PENETRANT & LUBRICANT L4**MSDS No.:** L412**Issue Date:** 06/06/2008**Supersedes Date:** 09/12/2006**II. Hazards Identification:****EMERGENCY OVERVIEW**

Danger: Harmful or Fatal if Swallowed. Eye and Skin Irritant. Contents Under Pressure.

Level 2 Aerosol

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Health Effects**Route(s) of Entry:**

Absorption, Eye, Inhalation, and Ingestion.

Health Hazards (Acute and Chronic):

See Signs and Symptoms below

Signs and Symptoms:

Eye Contact: Irritant. Prolonged contact may cause conjunctivitis.

Skin Contact: Irritant. Dermatitis may occur.

Inhalation: Product mist is an irritant to mucous membranes. Repeated exposure may cause narcosis..

Ingestion: HARMFUL OR FATAL IF SWALLOWED.

Medical Conditions Generally Aggravated by Exposure:

None Known

Other Health Warnings:

Vomiting and subsequent aspiration into the lungs may lead to chemical pneumonia and pulmonary edema which is a potentially fatal condition.

Potential Environmental Effects

Not Available

III. Composition/Information on Ingredients:

Chemical Name	CAS No.	% Range	Trade Secret
Carbon dioxide	124-38-9	1.0 - 5.0	
Corrosion Inhibitor	Proprietary	10.0 - 30.0	
Petroleum Distillate, Hydrotreated Middle	64742-46-7	15.0 - 40.0	
Petroleum Lubricating Oil Base Stock	64742-18-3	1.0 - 5.0	
Polytetrafluoroethylene	9002-84-0	1.0 - 5.0	
Synthetic Ester	Proprietary	15.0 - 40.0	
Zinc Compound	19210-06-1	0.1 - 1.0	

MSDS - Material Safety Data Sheet

Product Name: LIQUID WRENCH FOAMING PENETRANT & LUBRICANT L4

MSDS No.: L412

IV. First Aid Measures:

Emergency and First Aid Procedures:

Eye Contact: Flush eyes with clean water for 15 minutes while lifting eyelids and get prompt medical attention.

Skin Contact: Wash with soap and water thoroughly. If adverse effects persist, get prompt medical attention. Launder contaminated clothing before reuse.

Inhalation: Remove to fresh air. If breathing becomes difficult get prompt medical attention.

Ingestion: DO NOT INDUCE VOMITING! Call Poison Control Center, physician, or hospital emergency room immediately.

Note to Physicians:

N/E

V. Fire Fighting Measures:

Suitable Extinguishing Media:

Water Fog, Foam, Carbon Dioxide, Dry Chemical

Unsuitable Extinguishing Media:

Do not use forced water stream as this could cause the fire to spread.

Products of Combustion:

Normal products of Combustion

Protection of Firefighters:

Wear self-contained positive pressure breathing apparatus and protective clothes. Cool containers with a water fog. Use shield to protect from rupturing and venting containers.

VI. Accidental Release Measures:

Personal Precautions:

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental Precautions:

Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred.

Methods for Containment:

Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc).

Methods for Cleanup:

Using a scoop, place contaminated material into an approved chemical waste container. Where possible, vacuum spilled liquid using an explosion proof vacuum to recover material.

Other Information:

Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred.

VII. Handling and Storage:

Handling Precautions:

Handling: Use with adequate ventilation and proper protective equipment. Do not use or store near fire, sparks, or flame. Do not puncture or incinerate container. Exposure to temperatures above 120° may cause container to vent, rupture, or burst.

Storage Precautions:

Do not used in confined area without proper ventilation. Contact lenses may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!

VIII. Exposure Controls/Personal Protection:

MSDS - Material Safety Data Sheet**Product Name: LIQUID WRENCH FOAMING PENETRANT & LUBRICANT L4**

MSDS No.: L412

Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
Synthetic Ester	N/E	N/E	5 mg/m3
Petroleum Distillate, Hydrotreated Middle	5 mg/m3	5 mg/m3	Not Available
Corrosion Inhibitor	N/E	N/E	Not Available
Petroleum Lubricating Oil Base Stock	N/E	N/E	Not Available
Polytetrafluoroethylene	N/D	N/D	Not Available
Carbon dioxide	N/AV	5000 ppm	Not Available
Zinc Compound	N/E	N/E	Not Available

Engineering Controls:

See Section above for applicable exposure limits. Use with adequate ventilation. If TLV is exceeded, wear NIOSH approved respirator.

Personal Protective Equipment:

For prolonged exposure wear protective safety glasses, gloves, and apron.

IX. Physical and Chemical Properties:**Boiling Point:** > 300°F**Boiling Range:** Not Available**Solubility In Water:** Insoluble**Flash Point:** > 200°F**Odor Threshold:** Not Available**Vapor Density (AIR = 1):** N/D**pH Range:** Not Available**Decomposition Temp:** Not Available**Lower Explosive Limit:** N/D**Specific Gravity (H2O = 1):** 0.88**Other Information:** Moisture Content: < 0.07%
VOC Content: 0%**Melting Point:** N/A**Freezing Point:** Not Available**Evaporation Rate (Butyl Acetate = 1):** >1**Flash Point Method:** TCC**Appearance and Odor:** Slight viscous yellow brown color with a petroleum odor**Vapor Pressure (mm Hg.):** N/D**Partition Coefficient:** Not Available**Auto-Ignition Temp:** Not Available**Upper Explosive Limit:** N/D**X. Stability and Reactivity:****Stability:**

Stable

Conditions to Avoid:

See Incompatible Materials below.

Incompatible Materials:

Keep away from strong oxidizers and acids.

Hazardous Decomposition Products:

Normal products of Combustion

Possibility of Hazardous Reactions:

Will not occur

XI. Toxicological Information:

N/D

MSDS - Material Safety Data Sheet**Product Name: LIQUID WRENCH FOAMING PENETRANT & LUBRICANT L4**

MSDS No.: L412

XII. Ecological Information:

N/D

XIII. Disposal Considerations:

DISPOSAL: This container may be recycled in aerosol recycling centers when empty. Before offering for recycling, empty the can by using the product according to the label. DO NOT PUNCTURE! If recycling is not available, wrap the container and discard in the trash. Dispose of unused product in accordance with all local, state government and federal laws and regulations.

XIV. Transport Information:**Shipping Name:** Not Available**DOT Hazard Class:** Not Available**DOT Subsidiary Hazard Class:** Not Available**UN/NA#:** Not Available**Packing Group:** Not Available**Transportation Information:**

DOT Hazard Class: ORM-D

Shipping Name: Consumer Commodity

The DOT description is provided to assist in the proper shipping classification of this product and may not be suitable for international and air shipping purposes.

ICAO/IATA (US)

Shipping Name: Aerosols

Class: 2.1

UN number: UN1950

International:**ICAO/IATA**

UN number: UN1950

Shipping Name: Aerosols

Class: 2.1

IMDG

UN number: UN1950

Shipping Name: Aerosols

Class: 2.1

EmS: E-D, S-U

XV. Regulatory Information:

SARA 313 Reportable Chemicals:

Zinc Compounds (proprietary)

USA TSCA: All components of this material are listed on the US TSCA Inventory.

MSDS - Material Safety Data Sheet

Product Name: **LIQUID WRENCH FOAMING PENETRANT & LUBRICANT L4**

MSDS No.: L412

XVI. Other Information:

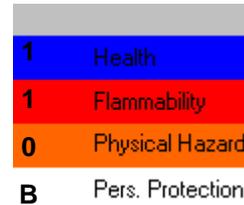
Chemical State: Liquid Gas Solid
Chemical Type: Pure Mixture
Hazard Category:
 Acute Chronic Fire
 Pressure Reactive



Additional Manufacturer Warnings:

Do not used in confined area without proper ventilation. Contact lenses may cause further damage in case of splash into eye. **KEEP AWAY FROM CHILDREN AND ANIMALS!**

N/E: Not Established
 N/D: Not Determined
 N/A: Not Applicable
 N/AV: Not Available



Additional Product Information:

While Radiator Specialty Company believes this data is accurate as of the revision date, we make no warranty with respect to the data and we expressly disclaim all liability for reliance thereon. The data is offered solely for information, investigation, and verification. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this MSDS. The user is responsible for full compliance.