MSDS No.: L349

I. Basic Information:

Manufacturer: RADIATOR SPECIALTY COMPANY Address: 600 RADIATOR ROAD City, ST Zip: INDIAN TRAIL, NC 28079 Country: Contact: Robert Geer Information Telephone Number: 704-684--181 1 Emergency Contact: Rocky Mountain Poision Control Center Emergency Telephone Number: 303-623-5716 Emergency Restrictions:

Product Name: LIQUID WRENCH NON-FLAMMABLE LUBRICATING & PENETRATING OIL WITH CERFLON MSDS No.: L349

Issue Date: 03/30/2010 Supersedes Date: 07/14/2009

II. Hazards Identification:

EMERGENCY OVERVIEW

Danger: Harmful or fatal if swallowed. Eye and skin irritant. Vapor Harmful,

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, Inhalation, and Ingestion.

Health Hazards (Acute and Chronic):

Excessive ingestion may cause stomach irritation, nausea, vomiting. May complicate existing liver and kidney disease.

Signs and Symptoms:

Eye Contace: Irritant. Prolonged contact may cause conjunctivitis. Skin Contact: Irritant. Defatting of tissue, dermatitis may occur. Inhalation: Irritant to mucous membranes. Repeated exposure may cause narcosis.. Ingestion: HARMFUL OR FATAL IF SWALLOWED. May cause burns to mouth, throat & stomach. Medical Conditions Generally Aggravated by Exposure:

Prolonged exposure above the OSHA permissible exposure limit may complicate existing liver and kidney diseases.

Other Health Warnings:

Aspiration of vomitus into the lungs can cause pneumonitis, which can be fatal.

Potential Environmental Effects

Not Available

III. Composition/Information on Ingredients:

Chemical Name	CAS No.	% Range	Trade Secret
Naphthenic Petroleum Distillate	64742-52-5	20.0 - 30.0	
Tetrachloroethylene	127-18-4	60.0-100.0	

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.

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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:

In the presence of water: hydrochloric acid. Ignition sources and hot metals surfaces: phosgene and chlorine. Flames, welding, and high temperatures induce decomposition May liberate corrosive hydrochloric acid or toxic phosgene fumes.

Protection of Firefighters:

Wear self-contained positive pressure breathing apparatus and protective clothes.

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. Run off to sewer may create fire or explosion hazard.

Methods for Containment:

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

Methods for Cleanup:

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

Other Information:

If run-off occurs, notify proper authorities as required that a spill has occurred.

VII. Handling and Storage:

Handling Precautions:

Use with adequate ventilation and proper protective equipment. Vapors are heavier that air and will collect in low areas. Do not use or store near fire, sparks, or open flame. Do not puncture or incinerate container. Exposure to temperatures above 120° may cause container to vent, rupture, or burst. Keep away from foods.

Storage Precautions:

Do not store finish product at temperatures above 120°F.

VIII. Exposure Controls/Personal Protection:

Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
Tetrachloroethylene	25 ppm	25 ppm	Not Available
Naphthenic Petroleum Distillate	5 mg/m3	5 mg/m3	Not Available

Engineering Controls:

See above Section of applicable exposure limits. Maintain adequate ventilation.

Avoid breathing vapors. In restricted areas, use approved chemical filters designed to remove vapor. In confined areas, use approved air line type respirator or hood. A self-contained breathing apparatus is required for vapor concentrations above TLV limits.

Personal Protective Equipment:

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

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IX. Physical and Chemical Properties:

Boiling Point: 248°F Boiling Range: Not Available Solubility In Water: Insoluble Flash Point: N/A Odor Threshold: Not Available Vapor Density (AIR = 1): 5.83 pH Range: N/A Decomposition Temp: Not Available Lower Explosive Limit: N/A Specific Gravity (H20 = 1): 1.34 Other Information: VOC Content: 0%

Melting Point: N/A Freezing Point: Not Available Evaporation Rate (Butyl Acetate = 1): 0.95 Flash Point Method: N/A Appearance and Odor: Opaque dense yellow suspension with sweet odor Vapor Pressure (mm Hg.): Not Det. Partition Coefficient: Not Available Auto-Ignition Temp: Not Available Upper Explosive Limit: N/A

X. Stability and Reactivity:

Stability:

Stable

Conditions to Avoid:

See Incompatible Materials below

Incompatible Materials:

Avoid contact with metals such as aluminum powders, magnesium powders, potassium, sodium, and zinc powder. Avoid open flames and hot glowing surfaces. Liquid oxygen and strong oxidants can form explosive mixtures of perchloroethylene.

Hazardous Decomposition Products:

In the presence of water: hydrochloric acid. Ignition sources and hot metals surfaces: phosgene and chlorine. Flames, welding, and high temperatures induce decomposition.

Possibility of Hazardous Reactions:

Will not occur

XI. Toxicological Information:

ACUTE INHALATION LC50: (rats) 5040 ppm for 8 hours. Moderately toxic. ACUTE DERMAL LD50: (rabbit) > 3228 mg/kg. Slight to very low toxicity SKIN IRRITATION: Mildly irritating. EYE IRRITATION: Mildly irritating. ACUTE ORAL LD50: (rats) 2629 mg/kg. Moderalely toxic.

This product is listed under IARC as a 2A

XII. Ecological Information:

Toxic to aquatic life.

XIII. Disposal Considerations:

DISPOSAL: This container may be recycled in a recycling centers when empty. Before offering for recycling, empty the can or bottle by using the product according to the label. If recycling is not available, wrap the empty container and discard in the trash. Do not dump into sewers, on the ground, or into any body of water. Dispose of unused product in accordance with all local, state government and federal laws and regulations

XIV. Transport Information:

Shipping Name: Not Available

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DOT Hazard Class: Not Available

UN/NA#: Not Available

Transportation Information:

Shipping Name: Toxic, liquids, organic, n.o.s. (tetrachloroethylene), Marine pollutant DOT Hazard Class: 6.1 Packaging Group: III UN Number: UN2810 RQ

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)

UN number: UN2810 Shipping Name: Toxic, liquids, organic, n.o.s. (tetrachloroethylene), Marine pollutant. Class: 6.1 Packaging Group: III

International: ICAO/IATA UN number: UN2810 Shipping Name: Toxic, liquids, organic, n.o.s. (tetrachloroethylene), Marine pollutant. Class: 6.1 Packaging Group: III

IMDG UN number: UN2810 Shipping Name: Toxic, liquids, organic, n.o.s. (tetrachloroethylene), Marine pollutant. Class: 6.1 Packaging Group: III

XV. Regulatory Information:

USA TSCA: All chemicals used are listed on the TSCA Inventory. CERCLA RQ: 100 lbs SARA 302: Not listed as a Extremely Hazardous Substance SARA 311/312 HAZARD CLASS: Acute, Chronic

SARA 313 REPORTABLE CHEMICALS: Tetrachloroethylene 127-18-4

WARNING: This product product contains a chemical known to the State of California to cause cancer.

STATE RIGHT-TO-K	NOW:
Tetrachloroethylene	127-18-4

XVI. Other Information:							
Chemical State: Chemical Type:	Liquid Pure	Gas Mixture	Solid	NFPA Health	Fire 0 Reactivity		
Hazard Category:	X Chronic Pressure	Fire Reactive		3 Specjal			
Additional Manufacturer Warnings:							
Do not used in confined area without proper ventilation. Contact lenses		3	Health				
may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!			0	Flammability			
				0	Physical Hazard		
				н	Pers. Protection		

DOT Subsidiary Hazard Class: Not Available Packing Group: Not Available

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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.