MSDS - Material Safety Data Sheet

Product Name: UNIVERSAL CHAIN LUBE
MSDS No.: L711

I. Basic Information:

Manufacturer: RADIATOR SPECIALTY COMPANY
Address: 600 RADIATOR ROAD
City, ST. Zip: INDIAN TRAIL, NC 28079
Country:

Product Name: UNIVERSAL CHAIN LUBE
MSDS No.: L711

Issue Date: 02/02/2010
Supersedes Date: 08/28/2009

II. Hazards Identification:

EMERGENCY OVERVIEW
Danger: Harmful for fatal if swallowed, Eye and Skin Irritant, Contents under pressure.

Level 3 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:
- Eyes, skin, inhalation, ingestion

Health Hazards (Acute and Chronic):
- See signs and symptoms below

Signs and Symptoms:
- Eye Irritant. Skin irritation, defatting and dermatitis on prolonged exposure.
- Vapors harmful. May cause irritation to lungs, narcosis effects.
- Harmful 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:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>% Range</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>3.0 - 7.0</td>
<td></td>
</tr>
<tr>
<td>Aliphatic Hydrocarbon Solvent</td>
<td>8052-41-3</td>
<td>40.0 - 70.0</td>
<td></td>
</tr>
<tr>
<td>Butene, homopolymer</td>
<td>9003-29-6</td>
<td>10.0 - 30.0</td>
<td></td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>124-38-9</td>
<td>1.0 - 5.0</td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>0.1 - 1.0</td>
<td></td>
</tr>
<tr>
<td>Ethylene/Propylene Co-Polymer</td>
<td>9010-79-1</td>
<td>1.0 - 5.0</td>
<td></td>
</tr>
<tr>
<td>Mesitylene</td>
<td>108-67-8</td>
<td>3.0 - 7.0</td>
<td></td>
</tr>
<tr>
<td>Molybdenum, bis carbamodithioate oxo thioxo complexes</td>
<td>906665-74-5</td>
<td>0.1 - 1.0</td>
<td></td>
</tr>
<tr>
<td>Naphthenic Petroleum Distillate</td>
<td>64742-52-5</td>
<td>0.1 - 1.0</td>
<td></td>
</tr>
<tr>
<td>Petroleum Oil</td>
<td>64742-65-0</td>
<td>10.0 - 30.0</td>
<td></td>
</tr>
</tbody>
</table>
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MSDS No.: L711

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene (mixed isomers)</td>
<td>1330-20-7</td>
<td>1.0 - 5.0</td>
</tr>
<tr>
<td>Zinc Compound</td>
<td>19210-06-1</td>
<td>&lt;0.1</td>
</tr>
</tbody>
</table>

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/D

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: Carbon dioxide, carbon monoxide, smoke, nitrogen and sulfur oxides

Protection of Firefighters:

Wear self-contained positive pressure breathing apparatus and protective clothes. Use shield to protect from rupturing and venting containers. At elevated temperatures containers may vent, rupture or burst, even violently

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 an explosion proof vacuum to recover material.

Other Information:

All equipment used with handling the concentrate must be grounded. 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 near fire, sparks, or flame. Do not puncture or incinerate container. Contact lenses may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!

Storage Precautions:

Store in cool, well ventilated area below 120°F away from heat sources.

VIII. Exposure Controls/Personal Protection:
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**MSDS No.:** L711

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic Hydrocarbon Solvent</td>
<td>100 ppm</td>
<td>100 ppm</td>
<td>Not Available</td>
</tr>
<tr>
<td>Ethylene/Propylene Co-Polymer</td>
<td>N/E</td>
<td>N/E</td>
<td>Not Available</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>N/E</td>
<td>25 ppm</td>
<td>Not Available</td>
</tr>
<tr>
<td>Mesitylene</td>
<td>N/A</td>
<td>N/A</td>
<td>Not Available</td>
</tr>
<tr>
<td>Xylene (mixed isomers)</td>
<td>100 ppm</td>
<td>100 ppm</td>
<td>Not Available</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>N/AV</td>
<td>5000 ppm</td>
<td>Not Available</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100 ppm</td>
<td>100 ppm</td>
<td>Not Available</td>
</tr>
<tr>
<td>Petroleum Oil</td>
<td>5 mg/m3</td>
<td>5 mg/m3</td>
<td>Not Available</td>
</tr>
<tr>
<td>Zinc Compound</td>
<td>N/E</td>
<td>N/E</td>
<td>Not Available</td>
</tr>
<tr>
<td>Butene, homopolymer</td>
<td>N/E</td>
<td>N/E</td>
<td>Not Available</td>
</tr>
<tr>
<td>Naphthenic Petroleum Distillate</td>
<td>5 mg/m3</td>
<td>5 mg/m3</td>
<td>Not Available</td>
</tr>
<tr>
<td>Molybendum, bis carbamidithioate o xo thioxo complexes</td>
<td>5 mg/m3</td>
<td>10 mg/m3</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

**Engineering Controls:**  
See above Section 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:** 315°F  
- **Boiling Range:** Not Available  
- **Solubility in Water:** Insoluble  
- **Flash Point:** 110°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):** 0.87  
- **Melting Point:** N/A  
- **Freezing Point:** Not Available  
- **Evaporation Rate (Butyl Acetate = 1):** N/D  
- **Flash Point Method:** TCC  
- **Appearance and Odor:** Clear bright yellow with 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:**  
Oxidizing agents and acids.

**Hazardous Decomposition Products:**  
Normal products of combustion: Carbon dioxide, carbon monoxide, smoke, nitrogen and sulfur oxides

**Possibility of Hazardous Reactions:**  
Will not occur
XI. Toxicological Information:

N/D

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
EmS: F-D, S-U

IMDG
UN number: UN1950
Shipping Name: Aerosols
Class: 2.1

XV. Regulatory Information:

SARA 313 Reportable Chemicals:
1,2,4-Trimethylbenzene (95-63-6)
Ethylbenzene (100-41-4)
Xylene (1330-20-7)
Zinc Dithiophosphate (19210-06-1)

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

Warning: This product contains a chemical(s) known to the State of California to cause cancer or birth defects or other reproductive harm.

State RTK Chemicals:
Ethylbenzene (100-41-4)
Xylene (1330-20-7)
Carbon dioxide (124-38-9)
Product Name: UNIVERSAL CHAIN LUBE

Chemical State: Liquid
Chemical Type: Mixture

Hazard Category: Acute

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!

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.