Product Name: HEAVY DUTY SILICONE SPRAY LUBRICANT

I. Basic Information:

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

Product Name: HEAVY DUTY SILICONE SPRAY LUBRICANT
MSDS No.: M914

Issue Date: 01/22/2013
Supersedes Date: 09/24/2012

II. Hazards Identification:

EMERGENCY OVERVIEW
Flammable. Harmful or 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:
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. Defatting of tissue, dermatitis may occur.
Inhalation: Irritant to mucous membranes. Repeated exposure may cause narcosis..
Ingestion: HARMFUL OR FATAL IF SWALLOWED.

Medical Conditions Generally Aggravated by Exposure:
N/D

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>Carbon dioxide</td>
<td>124-38-9</td>
<td>3.0 - 4.0</td>
<td></td>
</tr>
<tr>
<td>Dimethyl Polysiloxane</td>
<td>63148-62-9</td>
<td>3.0 - 7.0</td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>0.1 - 1.0</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbon Fluid</td>
<td>64742-47-8</td>
<td>10.0 - 30.0</td>
<td></td>
</tr>
<tr>
<td>Isopropylbenzene</td>
<td>98-82-8</td>
<td>1.0 - 5.0</td>
<td></td>
</tr>
<tr>
<td>Low Odor Base Solvent</td>
<td>64742-96-7</td>
<td>10.0 - 30.0</td>
<td></td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>0.1 - 1.0</td>
<td></td>
</tr>
<tr>
<td>Naphthenic Petroleum Distillate</td>
<td>64742-52-5</td>
<td>3.0 - 7.0</td>
<td></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. 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 give oxygen and get prompt medical attention. If breathing stops, give artificial respiration and get prompt medical attention. Ingestion: DO NOT INDUCE VOMITING! Call Poison Control Center, physician, or hospital emergency room immediately. Aspiration of vomitus into the lungs can cause pneumonitis, which can be fatal.

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, smoke, carbon dioxide, carbon monoxide, and sulfur trioxides.

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:
Eliminate all ignition sources. 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-metallic 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:
Eliminate all ignition sources. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. 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. Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc). Using a non-metallic scoop, place contaminated material into an approved chemical waste container. Where possible, vacuum spilled liquid using an explosion proof vacuum to recover material. 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:
Flammable. Store in cool, well ventilated area below 120°F away from heat sources, oxidizers and acids. Exposure to temperatures above 120°F may cause container to vent, rupture, or burst.
**MSDS - Material Safety Data Sheet**

**Product Name:** HEAVY DUTY SILICONE SPRAY LUBRICANT  
**MSDS No.:** M914

### VIII. Exposure Controls/Personal Protection:

<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>Dimethyl Polysiloxane</td>
<td>N/E</td>
<td>N/E</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>Naphthenic Petroleum Distillate</td>
<td>5 mg/m3</td>
<td>5 mg/m3</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>Ethylbenzene</td>
<td>100 ppm</td>
<td>100 ppm</td>
<td>Not Available</td>
</tr>
<tr>
<td>Hydrocarbon Fluid</td>
<td>5 mg/m3</td>
<td>5 mg/m3</td>
<td>Not Available</td>
</tr>
<tr>
<td>Trimethyl benzene</td>
<td>25 ppm (TWA)</td>
<td>25 ppm (TWA)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Isopropylbenzene</td>
<td>50 ppm</td>
<td>50 ppm</td>
<td>Not Available</td>
</tr>
<tr>
<td>Low Odor Base Solvent</td>
<td>N/E</td>
<td>N/E</td>
<td>Not Available</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>10 ppm</td>
<td>10 ppm</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

**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:** 310°F
- **Boiling Range:** N/D
- **Solubility in Water:** Insoluble
- **Flash Point:** 125°F
- **Odor Threshold:** N/D
- **Vapor Density (AIR = 1):** N/D
- **pH Range:** N/A
- **Decomposition Temp:** N/D
- **Lower Explosive Limit:** N/D
- **Specific Gravity (H2O = 1):** 0.81
- **Other Information:** % VOC: 56.86%
- **Melting Point:** N/A
- **Freezing Point:** N/D
- **Evaporation Rate (Butyl Acetate = 1):** N/D
- **Flash Point Method:** TCC
- **Appearance and Odor:** Clear to slight yellow liquid with petroleum odor.
- **Vapor Pressure (mm Hg.):** N/D
- **Partition Coefficient:** N/D
- **Auto-Ignition Temp:** N/D
- **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, smoke and Nitrogen and Sulfur Oxides

**Possibility of Hazardous Reactions:**
**MSDS - Material Safety Data Sheet**

**Product Name:** HEAVY DUTY SILICONE SPRAY LUBRICANT

**MSDS No.:** M914

Will not occur

### XI. Toxicological Information:

N/D

### XII. Ecological Information:

N/D

### 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 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: F-D, S-U

### XV. Regulatory Information:
Product Name: HEAVY DUTY SILICONE SPRAY LUBRICANT

MSDS No.: M914

SARA 313 Reportable Chemicals.
1,2,4-Trimethylbenzene  95-63-6
Isopropylbenzene  100-41-4
Ethylbenzene  100-41-4
Naphthalene  91-20-3

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
Aliphatic hydrocarbon solvent  8052-41-3
Trimethylbenzene  25551-13-7
Ethylbenzene  100-41-4
1,2,4-Trimethylbenzene  95-63-6
Isopropylbenzene  98-82-8
Naphthalene  91-20-3

XVI. Other Information:

- Chemical State: Liquid
- Chemical Type: Pure
- Hazard Category: Acute
- Pressure

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.