Material Safety Data Sheet

1 - Chemical Product and Company Identification

Manufacturer: WD-40 Company  
Address: 1061 Cudahy Place (92110)  
P.O. Box 80607  
San Diego, California, USA  
92138 –0607  
Telephone: Emergency only: 1-888-324-7596 (PROSAR)  
Information: 1-888-324-7596  
Chemical Spills: 1-800-424-9300 (Chemtrec)  
1-703-527-3887 (International Calls)  
Trade Name: WD-40 Specialist Dirt & Dust Resistant Dry Lube PTFE Spray  
Chemical Name: Organic Mixture  
Product Use: Cleaner, Lubricant  
MSDS Date Of Preparation: 12/07/2011

2 – Hazards Identification

Emergency Overview:  
DANGER! Extremely flammable aerosol. Contents under pressure. Harmful or fatal if swallowed.  
Extremely Flammable Liquid and Vapor. Vapor may cause flash fire. If swallowed, may be aspirated and cause lung damage. May cause eye, skin and respiratory tract irritation. Avoid eye contact. Use only with adequate ventilation. Keep away from heat, sparks, flames and all other sources of ignition.

Symptoms of Overexposure:  
Inhalation: Mist or vapor can irritate the throat and lungs. High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.  
Skin Contact: May cause skin irritation with short-term exposure with redness, itching and burning of the skin. Prolonged and/or repeated contact may produce defatting and possible dermatitis.  
Eye Contact: Contact may be irritating to eyes. May cause redness, stinging, swelling and tearing.  
Ingestion: This product has low oral toxicity. If swallowed, this material may cause irritation of the mouth, throat and esophagus. Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea, dizziness, drowsiness and other central nervous system effects. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.  
Chronic Effects: Prolonged or repeated skin contact may defat the skin resulting in irritation and dermatitis.  
Medical Conditions Aggravated by Exposure: Preexisting eye, skin and respiratory conditions may be aggravated by exposure.

Suspected Cancer Agent:  
Yes  No  X

3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>Weight Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane</td>
<td>64742-89-8</td>
<td>70-80%</td>
</tr>
<tr>
<td></td>
<td>142-82-5</td>
<td></td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>110-82-7</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>Petroleum Solvent</td>
<td>64741-66-8</td>
<td>5-10%</td>
</tr>
<tr>
<td></td>
<td>64742-47-8</td>
<td></td>
</tr>
<tr>
<td>Calcium Sulfonate</td>
<td>Proprietary</td>
<td>1-5%</td>
</tr>
<tr>
<td>Mineral Oil</td>
<td>Proprietary</td>
<td>1-5%</td>
</tr>
<tr>
<td>Propane Propellant</td>
<td>74-98-6</td>
<td>10-20%</td>
</tr>
</tbody>
</table>
See Section 8 for Exposure Limits

4 – First Aid Measures

**Ingestion (Swallowed):** Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

**Eye Contact:** Flush thoroughly with water for 15 minutes. Remove contact lenses if present after the first 5 minutes and continue flushing. Get medical attention if irritation persists.

**Skin Contact:** Wash with soap and water. If irritation develops and persists, get medical attention.

**Inhalation (Breathing):** If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

5 – Fire Fighting Measures

**Extinguishing Media:** Use water fog, dry chemical, carbon dioxide or foam. Cool fire exposed containers with water.

**Special Fire Fighting Procedures:** Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting cans.

**Unusual Fire and Explosion Hazards:** Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Extremely flammable liquid and vapor. Vapors can cause a flash fire. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. A vapor and air mixture can create an explosion hazard in confined spaces.

6 – Accidental Release Measures

Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

**Handling:** Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

**Storage:** Store in a cool, well-ventilated area, away from incompatible materials. Do not store in direct sunlight or above 120°F. U.F.C (NFPA 30B) Level 3 Aerosol.

8 – Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane</td>
<td>500 ppm TWA OSHA PEL, 500 ppm Skin TWA, 400 ppm STEL ACGIH TLV</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>300 ppm TWA OSHA PEL, 100 ppm TWA ACGIH TLV</td>
</tr>
<tr>
<td>Petroleum Solvent</td>
<td>1400 mg/m3 TWA Supplier Recommended (total hydrocarbon)</td>
</tr>
<tr>
<td>Calcium Sulfonate</td>
<td>None Established</td>
</tr>
<tr>
<td>Mineral Oil</td>
<td>5 mg/m3 TWA, 10 mg/m3 STEL ACGIH TLV, 5 mg/m3 TWA OSHA PEL</td>
</tr>
<tr>
<td>Propane Propellant</td>
<td>1000 ppm TWA OSHA PEL, 1000 ppm TWA ACGIH TLV (aliphatic hydrocarbon gas)</td>
</tr>
</tbody>
</table>
The Following Controls are Recommended for Normal Consumer Use of this Product

**Engineering Controls:** Use in a well-ventilated area.
**Personal Protection:**
**Eye Protection:** Avoid eye contact. Always spray away from face.
**Skin Protection:** Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where prolonged skin contact is likely.
**Respiratory Protection:** None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

**Engineering Controls:** Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

**Personal Protection:**
**Eye Protection:** Safety goggles recommended where eye contact is possible.
**Skin Protection:** Wear chemical resistant gloves.
**Respiratory Protection:** None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**Work/Hygiene Practices:** Wash with soap and water after handling.

9 – Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>90-140°C (194-284°F)</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>40-50 psi @ 70°F</td>
</tr>
<tr>
<td>Percent Volatile</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Coefficient of Water/Oil</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Distribution</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>&lt;-29.2°F Tag Closed Cup</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.72</td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Greater than 1</td>
</tr>
<tr>
<td>VOC</td>
<td>93.2%</td>
</tr>
<tr>
<td>Appearance/Odor</td>
<td>Clear liquid with a pleasant odor.</td>
</tr>
<tr>
<td>Flammable Limits</td>
<td>LEL: 0.9% UEL: 9.5%</td>
</tr>
</tbody>
</table>

10 – Stability and Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** Avoid heat, sparks, flames and other sources of ignition.

**Incompatibilities:** Strong oxidizers, acids and bases.

**Hazardous Decomposition Products:** Carbon monoxide and carbon dioxide, smoke fumes, unburned hydrocarbons and small amounts of hydrogen fluoride and carbonyl fluoride.

11 – Toxicological Information

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard. None of the components of this product is listed as a carcinogen or suspected carcinogen or is considered a reproductive hazard.

12 – Ecological Information

No data is currently available.

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations. Do not puncture, crush or incinerate containers, even when empty.

14 – Transportation Information

DOT Surface Shipping Description: Consumer Commodity, ORM-D until 12/31/2013
After 1/1/2014  UN1950, Aerosols, 2.1 Ltd. Qty   (Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)

IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY

15 – Regulatory Information

U.S. Federal Regulations:
CERCLA 103 Reportable Quantity: This product has an RQ of 10,000 based on the RQ for cyclohexane of 1000 lbs. In addition, oil spills are reportable to the National Response Center under the Clean Water Act. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:
Hazard Category For Section 311/312: Acute Health, Fire Hazard, Sudden Release of Pressure
Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: Cyclohexane <10%
Section 302 Extremely Hazardous Substances (TPQ): None
EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory

Canadian WHMIS Classification: Class B-5 (Flammable Aerosol), Class D-2-B (Toxic material causing other toxic effects)
This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

16 – Other Information:

HMIS Hazard Rating:
Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Reactivity – 0 (minimal hazard)

SIGNATURE: [Signature] TITL: Director of Global Consumer Relations and Regulatory Affairs
REVISION DATE: December 2011 SUPERSEDES: NEW