1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Dow Corning Corporation
South Saginaw Road
Midland, Michigan  48686

24 Hour Emergency Telephone:  (989) 496-5900
Customer Service:  (989) 496-6000
Product Disposal Information:  (989) 496-6315
CHEMTREC:  (800) 424-9300

MSDS No.:  01889796
Revision Date:  2002/01/22

Generic Description:  Silicone grease.
Physical Form:  Grease
Color:  Black
Odor:  Some odor

NFPA Profile:  Health  0  Flammability  1  Instability/Reactivity  0

Note:  NFPA = National Fire Protection Association

2. OSHA HAZARDOUS COMPONENTS

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Wt %</th>
<th>Component Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1.0 - 5.0</td>
<td>Zinc Naphthenate</td>
</tr>
<tr>
<td>10448-09-6</td>
<td>&lt;0.1</td>
<td>Phenylheptamethyl cyclotetrasiloxane</td>
</tr>
<tr>
<td>33204-76-1</td>
<td>&lt;0.1</td>
<td>2,6-cis-Diphenylhexamethyl cyclotetrasiloxane</td>
</tr>
</tbody>
</table>

The above components are hazardous as defined in 29 CFR 1910.1200.

3. EFFECTS OF OVEREXPOSURE

Acute Effects

Eye:  Direct contact may cause mild irritation.
Skin:  No significant irritation expected from a single short-term exposure.
Inhalation:  No significant effects expected from a single short-term exposure.
Oral:  Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin:  No known applicable information.
Inhalation:  No known applicable information.
Oral:  No known applicable information.

Signs and Symptoms of Overexposure

No known applicable information.
Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

4. FIRST AID MEASURES

Eye: Immediately flush with water for 15 minutes.
Skin: No first aid should be needed.
Inhalation: No first aid should be needed.
Oral: No first aid should be needed.
Comments: Treat according to person's condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable.
Autoignition Temperature: Not determined.
Flammability Limits in Air: Not determined.
Extinguishing Media: On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO2), dry chemical or water spray. Water can be used to cool fire exposed containers.
Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
Unusual Fire Hazards: None.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Metal oxides. Formaldehyde. Silicon dioxide.

6. ACCIDENTAL RELEASE MEASURES
Containment/Clean up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since some silicone materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call Dow Corning Corporation, (989) 496-5900, if additional information is required.

7. HANDLING AND STORAGE

Use with adequate ventilation. Traces of benzene (carcinogen) may form if heated in air above 300 F (149 C). Provide ventilation to control vapor exposure within inhalation guidelines when handling at elevated temperatures. Review the OSHA benzene regulation for detailed information on safe handling requirements. Use at high temperatures may evolve or generate phenylethamethylcyclotetrasiloxane, 2,6-cis-diphenylhexamethylcyclotetrasiloxane. Provide adequate ventilation to control within exposure guidelines. Personnel should wear organic vapor respirators until workplace exposure levels have been determined. Avoid eye contact.

Use reasonable care and store away from oxidizing materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Component Name</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Zinc Naphthenate</td>
<td>Observe particulate limits. OSHA PEL: TWA 15 mg/m3 total dust, 5 mg/m3 respirable fraction. ACGIH TLV: TWA 10 mg/m3 inhalable particulate, 3 mg/m3 respirable particulate.</td>
</tr>
<tr>
<td>10448-09-6</td>
<td>Phenylethamethyl cyclotetrasiloxane</td>
<td>Dow Corning guide: TWA-skin: 1.8 ppb.</td>
</tr>
<tr>
<td>33204-76-1</td>
<td>2,6-cis-Diphenylhexamethyl cyclotetrasiloxane</td>
<td>Dow Corning guide: TWA-skin: 0.4 ppb as vapor, 0.7 microgms/m3 as aerosol.</td>
</tr>
</tbody>
</table>

Engineering Controls

Local Ventilation: None should be needed.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.
Skin: Washing at mealtime and end of shift is adequate.
**Personal Protective Equipment for Spills**

**Eyes:** Use proper protection - safety glasses as a minimum.

**Skin:** Washing at mealtime and end of shift is adequate.

**Inhalation/Suitable Respirator:** No respiratory protection should be needed.

**Precautionary Measures:** Avoid eye contact. Use reasonable care.

**Comments:** Traces of benzene (carcinogen) may form if heated in air above 300 F (149 C). Provide ventilation to control vapor exposure within inhalation guidelines when handling at elevated temperatures. Review the OSHA benzene regulation for detailed information on safe handling requirements. Use at high temperatures may evolve or generate phenylheptamethylcyclotetrasiloxane, 2,6-cis-diphenylhexamethylcyclotetrasiloxane. Provide adequate ventilation to control within exposure guidelines. Personnel should wear organic vapor respirators until workplace exposure levels have been determined.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
<td>Grease</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor</td>
<td>Some odor</td>
</tr>
<tr>
<td>Specific Gravity @ 25°C</td>
<td>1.05</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor Pressure @ 25°C</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Volatile Content</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

Note: The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

### 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable.

**Hazardous Polymerization:** Hazardous polymerization will not occur.
Conditions to Avoid: None.
Materials to Avoid: Oxidizing material can cause a reaction.

11. TOXICOLOGICAL INFORMATION

Component Toxicology Information
This compound may contain low levels of phenylheptamethylcyclotetrasiloxane and 2,6-cis-diphenylhexamethylcyclotetrasiloxane which are estrogen-like chemicals. Estrogens are hormone substances which affect the reproductive system.

Special Hazard Information on Components
No known applicable information.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution
Complete information is not yet available.

Environmental Effects
Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants
Complete information is not yet available.

Ecotoxicity Classification Criteria

<table>
<thead>
<tr>
<th>Hazard Parameters (LC50 or EC50)</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Aquatic Toxicity (mg/L)</td>
<td>&lt;=1</td>
<td>&gt;1 and &lt;=100</td>
<td>&gt;100</td>
</tr>
<tr>
<td>Acute Terrestrial Toxicity</td>
<td>&lt;=100</td>
<td>&gt;100 and &lt;= 2000</td>
<td>&gt;2000</td>
</tr>
</tbody>
</table>

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)
When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal.

Call Dow Corning Corporate Environmental Management, (989) 496-6315, if additional information is required.

14. TRANSPORT INFORMATION
DOT Road Shipment Information (49 CFR 172.101)
Not subject to DOT.

Ocean Shipment (IMDG)
Not subject to IMDG code.

Air Shipment (IATA)
Not subject to IATA regulations.

Call Dow Corning Transportation, (989) 496-8577, if additional information is required.

15. REGULATORY INFORMATION


TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances:
None.

Section 304 CERCLA Hazardous Substances:
None.

Section 312 Hazard Class:
Acute: No
Chronic: Yes
Fire: No
Pressure: No
Reactive: No

Section 313 Toxic Chemicals:
None present or none present in regulated quantities.

Supplemental State Compliance Information

California
Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.
DOW CORNING CORPORATION
Material Safety Data Sheet

DOW CORNING(R) 41 EXTREME HIGH TEMP. BEARING GREASE

**Massachusetts**

<table>
<thead>
<tr>
<th>CAS Number</th>
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<tbody>
<tr>
<td>1333-86-4</td>
<td>15.0 - 40.0</td>
<td>Carbon black</td>
</tr>
</tbody>
</table>

**New Jersey**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Wt %</th>
<th>Component Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>63148-58-3</td>
<td>40.0 - 70.0</td>
<td>Phenylmethyl siloxane, trimethyl-terminated</td>
</tr>
<tr>
<td>63148-52-7</td>
<td>15.0 - 40.0</td>
<td>Dimethyl, phenylmethyl siloxane, trimethyl-terminated</td>
</tr>
<tr>
<td>1333-86-4</td>
<td>15.0 - 40.0</td>
<td>Carbon black</td>
</tr>
<tr>
<td>None</td>
<td>1.0 - 5.0</td>
<td>Zinc Naphthenate</td>
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**Pennsylvania**

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**16. OTHER INFORMATION**

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

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