



## Material Safety Data Sheet STC640 THERMALLY CONDUCTIVE GREASE

### Section 1. Product And Company Identification

Sil-More Industrial Ltd.

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Generic Description: Silicone compound  
Physical Form: Grease  
Color: Gary  
Odor: Slight odor  
NFPA Profile: Health 1 Flammability 1 Instability/Reactivity 0

### Section 2. Osha Hazardous Components

| <u>Hazard Classification</u> | <u>Wt%</u> |
|------------------------------|------------|
| Dimethyl Siloxane            | 10.0~15.0  |
| Metal Oxide                  | >50.0      |
| Metal Powder                 | 25.0~30.0  |

### Section 3. Hazards Identification

#### **POTENTIAL HEALTH EFFECTS**

##### **Acute Effects**

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

##### **Prolonged/Repeated Exposure Effects**

Skin: Repeated or prolonged exposure may cause irritation.  
Inhalation: No known applicable information.  
Oral: Repeated ingestion or swallowing large amounts may injure internally.



**Signs and Symptoms of Overexposure**

No known applicable information.

**Medical Conditions Aggravated by Exposure**

No known applicable information.

**Section 4. First Aid Measures**

|             |                                |
|-------------|--------------------------------|
| Eye:        | Immediately flush with water.  |
| Skin:       | No first aid should be needed. |
| Inhalation: | No first aid should be needed. |
| Oral:       | Get medical attention.         |
| Comments:   | Treat symptomatically.         |

**Section 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 (CO <sub>2</sub> ), 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. Use water spray to keep fire exposed containers cool. Determine the need to evacuate or isolate the area according to your local emergency plan. |
| 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. Silicone dioxide. Formaldehyde. Hydrogen. Metal oxides.



## Section 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. Materials in contact with water, moisture, acids or bases have the potential to generate hydrogen gas. Recovered material should be stored in a vented container. Clean area as appropriate since spilled 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.

## Section 7. Handling and Storage

Use with adequate ventilation. Avoid eye contact. Do not take internally.

Product may evolve minute quantities of flammable hydrogen gas which can accumulate. Adequately ventilate to maintain vapors well below flammability limits and exposure guidelines. Do not repackage. Do not store in glass containers which may shatter due to pressure build up. Clogged container vents may increase pressure build up. Keep container closed and store away from water or moisture.

## Section 8. Exposure Controls / Personal Protection

### **Component Exposure Limits**

There are no components with workplace exposure limits.

### **Engineering Controls**

Local Ventilation: Recommended.

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.    |
| Suitable Gloves:     | No special protection needed.                        |
| Inhalation:          | No respiratory protection should be needed.          |
| Suitable Respirator: | None should be needed.                               |

### **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. Do not take internally. Use reasonable care. |

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

### **Section 9. Physical and Chemical Properties**

|                          |                 |
|--------------------------|-----------------|
| Physical Form:           | Grease          |
| Color:                   | Gray            |
| Odor:                    | Slight odor     |
| Specific Gravity @ 25°C: | 2.10            |
| Viscosity:               | Not determined. |
| Freezing/Melting Point:  | Not determined. |
| Boiling Point:           | Not determined. |
| Vapor Pressure @ 25°C:   | Not determined. |
| Vapor Density:           | Not determined. |
| Solubility in Water:     | Not determined. |
| pH:                      | Not determined. |
| Volatile Content:        | Not determined. |

### **Section 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.

**Section 11. Toxicological Information**

**Component Toxicology Information**

This material contains zinc oxide. Zinc oxide produced adverse developmental effects when fed to rats at 200 mg/kg/day for 21 days prior to mating and throughout pregnancy. However, no adverse effects were observed at a dose of 100 mg/kg/day for the same duration.

**Special Hazard Information on Components**

No known applicable information.

**Section 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**

| Hazard Parameters (LC50 or EC50) | High  | Medium           | Low   |
|----------------------------------|-------|------------------|-------|
| Acute Aquatic Toxicity (mg/L)    | <=1   | >1 and <=100     | >100  |
| Acute Terrestrial Toxicity       | <=100 | >100 and <= 2000 | >2000 |

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.

**Section 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? Yes  
Characteristic Waste:



Reactive: D003

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

**Section 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.

**Section 15. Regulatory Information**

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.  
EPA has determined that the proprietary metal oxide in this product is a candidate for a non 5(e) Significant New Use Rule (SNUR) with significant new use designations as described in 40 CFR 721.80 (v)(1), (w)(1), and (x)(1). As of this MSDS revision date, EPA had not yet published a proposed or final rule. For further assistance, contact the Regulatory Compliance Department of Dow Corning Corporation.

**Section 16. Other Information**

Prepared by: Sil-More Industrial Ltd.

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.