# Material Safety Data Sheet



## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M(TM) Silicone Lubricant
**MANUFACTURER:** 3M
**DIVISION:** Industrial Adhesives and Tapes Division

**ADDRESS:** 3M Center
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 08/04/10
**Supercedes Date:** 02/26/10

**Document Group:** 05-6937-6

**Product Use:**
Intended Use: Industrial use

## SECTION 2: INGREDIENTS

| Ingredient | C.A.S. No. | % by Wt |
|---|---|---|
| ISOBUTANE | 75-28-5 | 70 - 80 |
| HEPTANE | 142-82-5 | 15 - 25 |
| POLY(DIMETHYLSILOXANE) | 63148-62-9 | 3 - 7 |

## SECTION 3: HAZARDS IDENTIFICATION

### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** in aerosol, transparent, very slight odor
**General Physical Form:** Liquid
**Immediate health, physical, and environmental hazards:** Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. May cause target organ effects. May cause frostbite.

### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**
Frostbite: Signs/symptoms may include intense pain, clouding of the cornea, redness, swelling, and blindness.

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Skin Contact:**
Frostbite: Signs/symptoms may include intense pain, discoloration of skin, and tissue destruction.

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

**Inhalation:**
Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Intentional concentration and inhalation may be harmful or fatal.

May be absorbed following inhalation and cause target organ effects.

**Ingestion:**
Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhea and vomiting.

**Target Organ Effects:**
Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

# SECTION 4: FIRST AID MEASURES

## 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

# SECTION 5: FIRE FIGHTING MEASURES

## 5.1 FLAMMABLE PROPERTIES

| | |
|---|---|
| **Autoignition temperature** | *No Data Available* |
| **Flash Point** | -50 ºF [*Test Method:* Tagliabue Closed Cup] [*Details:* CONDITIONS: Propellant] |
| **Flammable Limits - LEL** | Approximately 1.5 % volume |
| **Flammable Limits - UEL** | Approximately 8 % volume |

## 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

## 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

**Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.**

# SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions**

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available.

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

**Environmental procedures**

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

**Clean-up methods**

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Cover spill area with a fire-extinguishing foam. An aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Seal the container.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

# SECTION 7: HANDLING AND STORAGE

## 7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. Do not pierce or burn container, even after use. No smoking while handling this material. Do not spray near flames or sources of ignition. Avoid breathing of vapors, mists or spray. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Avoid contact with oxidizing agents.

## 7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container tightly closed. Store away from oxidizing agents.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Use with functioning spray booth or local exhaust. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment. Do not use in a confined area or areas with little or no air movement. If exhaust ventilation is not adequate, use appropriate respiratory protection. Provide ventilation adequate to control vapor concentrations below recommended exposure limits and/or control spray or mist.

## 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

### 8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.
The following eye protection(s) are recommended: Safety Glasses with side shields
.

### 8.2.2 Skin Protection

Not applicable. Wear insulated gloves to protect against frostbite.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.
Gloves made from the following material(s) are recommended: Nitrile Rubber
.

### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.
Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges
. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable.

### 8.3 EXPOSURE GUIDELINES

| Ingredient | Authority | Type | Limit | Additional Information |
|---|---|---|---|---|
| HEPTANE | OSHA | TWA | 2000 mg/m3 | |

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Odor, Color, Grade:** | in aerosol, transparent, very slight odor |
| **General Physical Form:** | Liquid |
| **Autoignition temperature** | *No Data Available* |
| **Flash Point** | -50 ºF [*Test Method:* Tagliabue Closed Cup] [*Details:* CONDITIONS: Propellant] |
| **Flammable Limits - LEL** | Approximately 1.5 % volume |
| **Flammable Limits - UEL** | Approximately 8 % volume |
| **Boiling point** | *No Data Available* |
| **Density** | 0.64 g/ml |
| **Vapor Density** | 2.97 [*Ref Std:* AIR=1] |
| **Specific Gravity** | 0.640 [*Ref Std:* WATER=1] |
| **pH** | *Not Applicable* |
| **Melting point** | *No Data Available* |
| **Solubility in Water** | Nil |
| **Evaporation rate** | 1.90 [*Ref Std:* WATER=1] |
| **Hazardous Air Pollutants** | 0 % weight [*Test Method:* Calculated] |
| **Volatile Organic Compounds** | Approximately 565 g/l [*Test Method:* calculated SCAQMD rule 443.1] [*Details:* low solids less exempts] |
| **Volatile Organic Compounds** | <=5.06 lb/gal [*Test Method:* calculated SCAQMD rule 443.1] [*Details:* low solids less exempts] |
| **Kow - Oct/Water partition coef** | *No Data Available* |
| **Percent volatile** | Approximately 95 % weight |
| **VOC Less H2O & Exempt Solvents** | <=94.7 % [*Test Method:* calculated per CARB title 2] |
| **Viscosity** | *Not Applicable* |
| **Solids Content** | 0 % |

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:**
**10.1 Conditions to avoid**
Heat

**10.2 Materials to avoid**

Strong oxidizing agents

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

| Substance | Condition |
|---|---|
| Carbon monoxide | During Combustion |
| Carbon dioxide | During Combustion |

## SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Incinerate in a permitted hazardous waste incinerator. Facility must be capable of handling aerosol cans. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.
Dispose of empty product containers in a sanitary landfill.
RECYCLE EMPTY AEROSOL CONTAINERS WHERE AVAILABLE.

**EPA Hazardous Waste Number (RCRA):** D001 (Ignitable)

**Since regulations vary, consult applicable regulations or authorities before disposal.**

## SECTION 14:TRANSPORT INFORMATION

**ID Number(s):**
62-4678-0930-7, 62-4678-0931-5, 62-4678-4930-3, 62-4678-4935-2, 78-8033-2219-3

**Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.**

## SECTION 15: REGULATORY INFORMATION

### US FEDERAL REGULATIONS

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

**This material contains a chemical which requires export notification under TSCA Section 12[b]:**

| Ingredient (Category if applicable) | C.A.S. No | Regulation | Status |
|---|---|---|---|
| HEPTANE | 142-82-5 | Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals | Applicable |

### STATE REGULATIONS

Contact 3M for more information.

### CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

Contact 3M for more information.

### INTERNATIONAL REGULATIONS

Contact 3M for more information.

**This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: OTHER INFORMATION

**NFPA Hazard Classification**

**Health:** 2 **Flammability:** 4 **Reactivity:** 0 **Special Hazards:** None

**Aerosol Storage Code:** 3

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision Changes:
Section 7: Handling information was modified.
Section 8: Skin protection phrase was modified.
Section 8: Prevention of swallowing information was modified.
Section 8: Eye/face protection information was modified.
Section 8: Skin protection - recommended gloves information was modified.
Section 8: Respiratory protection - recommended respirators information was modified.
Section 9: Property description for optional properties was modified.
Section 6: Personal precautions information was modified.
Section 6: Environmental procedures information was modified.
Section 6: Methods for cleaning up information was modified.
Section 10: Materials to avoid physical property was modified.
Section 10: Conditions to avoid physical property was modified.
Section 9: Density information was added.
Section 9: Property description for required properties was added.
Section 6: Environmental procedures heading was added.
Section 6: Personal precautions heading was added.
Section 8: Hand protection information was added.
Section 6: Clean-up methods heading was added.
Section 6: Release measures heading was deleted.



**3M MSDSs are available at www.3M.com**