

MATERIAL SAFETY DATA SHEET

MSDS FORMAT MEETS ANSI Z400.1-1993 AND OSHA 1910.1200



SENTINEL'S S-SILICONE

REVISION# 1

MSDS #

REVISION DATE: January 2, 2012

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Sentinel's S-SILICONE

PRODUCT NUMBER (S): 02050

SYNONYM: Sentinel's S-SILICONE

COMPANY IDENTIFICATION

Sentinel Lubricants Corp.
15755 N.W. 15th Ave.
Miami, FL 33169

EMERGENCY TELEPHONE NUMBERS

HEALTH (24 hr) : (800) 842-6400 or (305) 625-6400
TRANSPORTATION (24 hr) : (800) 842-6400
or (305) 625-6400 Int'l collect calls accepted

PRODUCT INFORMATION:

MSDS Requests: (800) 842-6400
Environmental, Safety, & Health Info: (800) 842-6400
Product Information: (800) 842-6400

2. COMPOSITION/INFORMATION ON INGREDIENTS

100% SENTINEL'S S-SILICONE

CONTAINING

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
n-HEXANE CAS110-54-3	ACGIH 50 ppm TLV 176 mg/m3 STEL N/A	OSHA 500 ppm PEL 1800 mg/m3	WHMIS Yes

DIMETHYLPOLYSILOXANE
Chemical Name: DIMETHOLPOLYSILOXANE
CAS63148-62-9

NONE

NA

COMPOSITION COMMENT

All the components of this material are in the Toxic Substances Control Act Chemical Substances Inventory.

This product fits the ACGIH definition for mineral oil mist. The ACGIH TLV is 50 mg/m3, the OSHA PEL is 1800 mg/m3.

3. HAZARD IDENTIFICATION AND EMERGENCY AND FIRST AID PROCEDURES

POTENTIAL HEALTH EFFECTS

EYE:

Flush eyes with large amounts of clear water for a minimum of 15 minutes. Flush thoroughly under the eyelids. Consult a physician for definitive treatment.

SKIN

In case of skin contact, remove any contaminated clothing and wash skin with soap and water. Launder or dry-clean clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high-pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

INGESTION

If ingested, DO NOT INDUCE VOMITING. Consult a physician immediately.

INHALATION

Remove from exposure, restore breathing and keep warm and quiet. Notify a physician if unconscious. Never give anything by mouth to an unconscious individual.

4. FIRST AID MEASURES

EYE:

No specific first aid measures are required because this material is not expected to cause eye irritation. As a precaution remove contact lenses if worn, and flush eyes with water.

SKIN

No specific first aid measures are required because this material is not expected to be harmful if it contacts the skin. As a precaution, remove clothing and shoes if contaminated. Use a waterless hand cleaner, mineral oil, or petroleum jelly to remove the material. Then wash skin with soap and water. Wash or clean contaminated clothing and shoes before reuse.

INGESTION

No specific first aid measures are required because this material is not expected to be harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an unconscious person.

INHALATION

If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

NOTE TO PHYSICIANS

In an accident involving high-pressure systems, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

5. FIRE FIGHTING MEASURES

SPECIAL NOTES:

Extremely Flammable per DOT 49 CFR 173.115

FIRE CLASSIFICATION:

Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible

FLAMMABLE PROPERTIES:

FLASH POINT (COC) -18°C (less than 0 °F) Min.

AUTOIGNITION: Approximately 266°C (511 °F)

FLAMMABILITY LIMITS (% by volume in air): Lower: 1.8 UPPER: 11.6

EXTINGUISHING MEDIA: CO2, Dry Chemical, Foam, Water Fog

NFPA RATINGS: Health 1; Flammability 3; Reactivity 0.

FIRE FIGHTING INSTRUCTIONS:

This liquid is volatile and gives off invisible vapors. Water may be ineffective but should be used to keep fire-exposed containers cool. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

COMBUSTION PRODUCTS:

Fumes, smoke, carbon monoxide, aldehydes and other decomposition products, in the case of incomplete combustion.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY NUMBER (24hr) : (800) 842-6400 or (305) 625-6400, International Collect Calls Accepted.

ACCIDENTAL RELEASE MEASURES:

Shut off and eliminate all ignition sources. Keep people away. Recover free product. Add sand, earth or suitable absorbent to spill area. Minimize breathing vapors. Minimize skin contact. Ventilate confined spaces. Open all windows and stores. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas. Assure conformity with applicable government regulations. Continue to observe precautions for volatile, flammable vapors from absorbed material.

Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

This material does not contain any CERCLA Hazardous Substances.

This material does not contain any SARA Title III Section 302 – Extremely Hazardous Substances.

This material does not contain any SARA Title III Section 313 – Toxic Chemicals.

7. HANDLING AND STORAGE

DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed.

Drum is not designed to contain pressure. Do not use pressure to empty drum or drum may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty drums should be completely drained, properly bunged, and promptly returned to a drum re-conditioner, or properly disposed of. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

GENERAL CONSIDERATION

Consider the potential hazards of this material (see section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS

Use in a well-ventilated area. If user operations generate an oil mist, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended mineral exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Where splashing is possible, wear safety glasses with side shields as a good safety practice.

EYE PROTECTION:

No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

SKIN PROTECTION:

No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: <Viton> <Nitrile> <Silver Shield>

RESPIRATORY PROTECTION

No respiratory protection is normally required. If user operations generate an oil mist below exposure limits. If not wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air purifying respirators: particulate.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:

Clear, Fluid, Bland Odor

pH:	Essentially Neutral
VAPOR PRESSURE:	150 mm Hg @20°C (68°F)
VAPOR DENSITY (AIR = 1):	3.0
BOILING RANGE:	66 - 69°C (151 - 156°F)
FREEZING POINT:	Less than -18°C (0°F)
MELTING POINT:	Same
SOLUBILITY:	Solubility in hydrocarbon solvents; insoluble in water.
SPECIFIC GRAVITY:	0.68 @ (15.6/15.6C)
EVAPORATION RATE:	15.5 @ 1 atm and 25°C (77°F), n-Butyl Acetate =1
VISCOSITY:	0.51 cst @ 25°C (77°F)
PERCENT VOLATILE (VOL):	100 @ 1 atm and 25°C (77°F)

10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:

No data available.

CHEMICAL STABILITY:

Stable.

CONDITIONS TO AVOID:

No data available.

INCOMPATIBILITY WITH OTHER MAETERIALS:

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:

The eye irritation hazard is based on data for a similar material.

SKIN EFFECTS:

The skin irritation hazard is based on data for a similar material.

EYE EFFECTS:

The eye irritation hazard is based on data for a similar material.

SKIN EFFECTS:

The skin irritation hazard is based on data for a similar material.

ACUTE ORAL EFFECTS:

The acute oral toxicity is based on data for a similar material.

ACUTE INHALATION EFFECTS:

The acute respiratory toxicity is based on data for a similar material.

ADDITIONAL TOXICOLOGY INFORMATION:

This product contains synthetic base oils not refined from petroleum base stocks. The potential of base oil prepared by this process to cause cancer has not been specifically addressed by the OSHA Hazard Communication Standard (29 CFR 1910.1200), the International Agency for Research on Cancer (IARC), nor the National Toxicology Program (NTP) Annual Report. However, the process conditions, chemical analysis, and the results of mutagenicity tests all support our opinion that these oils should not cause skin cancer.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

No data available.

ENVIRONMENTAL FATE:

This material is considered inherently biodegradable. Small accidental leaks or releases of this material are not expected present an environmental problem. See section 6 for Accidental Release Measures.

13. DISPOSAL CONSIDERATIONS

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods

14. TRANSPORTATION AND OSHA RELATED LABEL INFORMATION

The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: DESIGNATED AS A HAZARDOUS MATERIAL BY THE FEDERAL DOT
 DOT HAZARD CLASS: DANGER! EXTREMELY FLAMMABLE
 DOT IDENTIFICATION NUMBER: Hexane / Flammable liquid / UN 1208
 DOT PACKING GROUP: II

ADDITIONAL INFORMATION: Lubricating Oil, N.O.I.B.N. – Hazardous by U.S. DOT.
 ADR/RID Hazard Class – UN 1208

15. REGULATORY INFORMATION

SARA 311 CATEGORIES:

- | | |
|---------------------------------------|-----|
| 1. Immediate (Acute) Health Effects: | NO |
| 2. Delayed (Chronic) Health Effects: | YES |
| 3. Fire Hazard: | YES |
| 4. Sudden Release of Pressure Hazard: | NO |
| 5. Reactivity Hazard: | NO |

REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	22=TSCA Sect 5(a) (2)
02=MASS RTK	12=Cercla 302.4	23=TSCA Sect 6
03=NTP Carcinogen	13=MN RTK	24=TSCA Sect 12 (b)
04=CA Prop 65-Carcin	14=ACGIH TWA	25=TSCA Sect 8 (d)
05=CA Prop 65-Repro Tox	15=ACGIH STEL	26=TSCA Sect 8 (a)
06=IARC Group 1	16=ACGIH Calc TLV	27=TSCA Sect 4 (a)
07=IARC Group 2A	17=OSHA PEL	28=Canadian WHMIS
08=IARC Group 2B	18=DOT Marine Pollutant	29=OSHA CEILING
09=SARA 302/304	19=Sentinel TWA	30=Sentinel STEL
10=PA RTK	20=EPA Carcinogen	

The following components of this material are found on the regulatory lists indicated.

EU RISK AND SAFETY LABEL PHRASES:

May cause long-term adverse effects in the aquatic environment

NEW JERSEY RTK CLASSIFICATION:

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A.

34:5A-1 et. Seq., the product is to be identified as follows:

PETROLEUM OIL

WHMIS CLASSIFICATION:

This product is considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

16. OTHER INFORMATION

NFPA RATINGS: Health 1; Flammability 3; Reactivity 0;

HMIS RATINGS: Health 1; Flammability 3; Reactivity 0;

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation (Chronic Effect Indicator).

These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (For HMIS ratings)

REVISION STATEMENT:

This is a new Material Safety Data Sheet.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV	-	Threshold Limit Value	TWA	-	Time Weighted Average
STEL	-	Short-term Exposure Limit	TPQ	-	Threshold Planning Quantity
RQ	-	Reportable Quantity	PEL	-	Permissible Exposure Limit
C	-	Ceiling Limit	CAS	-	Chemical Abstract Service Number
A1-5	-	Appendix A Categories	()	-	Change Has Been Proposed
NDA	-	No Data Available	NA	-	Not Applicable

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1)

The above information is based on the data of which we are aware and is believed to be correct as of data hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date. Hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.