

# MED-359 @ 0.65 cSt

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 09/09/2015

Date of issue: 08/01/2014

Version: 2.0

## SECTION 1: Identification

### 1.1. Product identifier

Product form : Mixture  
Product name : MED-359 @ 0.65 cSt  
CAS No. : 107-46-0  
Synonyms : Silicone Fluid

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Ideal for providing lubricious and/or hydrophobic coating. For professional use only.

### 1.3. Details of the supplier of the safety data sheet

NuSil Technology LLC  
1050 Cindy Lane  
Carpinteria, California 93013  
USA  
(805) 684-8780  
[regcomp@nusil.com](mailto:regcomp@nusil.com)  
[www.nusil.com](http://www.nusil.com)

### 1.4. Emergency telephone number

Emergency number : 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and Maritime)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

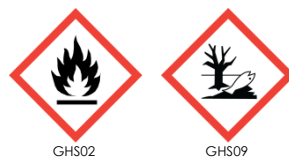
#### Classification (GHS-US)

Flam. Liq. 1 H224  
Aquatic Acute 1 H400  
Aquatic Chronic 1 H410

### 2.2. Label elements

#### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H224 - Extremely flammable liquid and vapor.

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (GHS-US) :

P210 - Keep away from sparks, open flames, hot surfaces, heat. - No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof ventilating, lighting, electrical equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye protection.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378 - In case of fire: Alcohol foam, dry chemical, carbon

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dioxide to extinguish.  
P391 - Collect spillage.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P501 - Dispose of contents/container according to local, regional, national, and international regulations.

### 2.3. Other hazards

Other hazards not contributing to the classification : Flammable vapors can accumulate in head space of closed systems. Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown acute toxicity (GHS-US)

0% of the mixture consists of ingredients of unknown acute toxicity.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Hexamethyldisiloxane	(CAS No) 107-46-0	100	Flam. Liq. 2, H225 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid measures after skin contact : Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid measures after ingestion : Rinse mouth thoroughly with water. Do NOT induce vomiting. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : None expected under normal conditions of use.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Repeated or prolonged exposure is likely to cause irritation.

Symptoms/injuries after eye contact : Direct contact with the eyes is likely irritating.

Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.

Chronic symptoms : None expected under normal conditions of use.

### 4.3. Indication of any immediate medical attention and special treatment needed

If you feel unwell, seek medical advice (show the label where possible).

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### SECTION 5: Fire-Fighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Alcohol foam, dry chemical, carbon dioxide.  
Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Extremely flammable liquid and vapor.  
Explosion hazard : May form flammable/explosive vapor-air mixture.  
Reactivity : Hazardous reactions will not occur under normal conditions.

#### 5.3. Advice for firefighters

- Precautionary measures fire : Exercise caution when fighting any chemical fire.  
Firefighting instructions : Use water spray or fog for cooling exposed containers. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.  
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. Avoid all unnecessary exposure.

##### 6.1.1. For non-emergency personnel

- Protective equipment : Use appropriate personal protection equipment (PPE).  
Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.  
Emergency procedures : Ventilate area. Stop leak if safe to do so. Eliminate ignition sources.

#### 6.2. Environmental precautions

Do not allow to enter drains or water courses. Contact competent authorities after a spill.

#### 6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Absorb and contain with inert material. Place contents in suitable container for disposal.  
Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container. Collect absorbed material and place into a sealed, labeled container for proper disposal. Do not take up in combustible material such as: saw dust or cellulosic material.

#### 6.4. Reference to other sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Additional hazards when processed : Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.  
Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace.

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### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment. Use explosion-proof ventilating, lighting, electrical equipment.
- Storage conditions : Store in a cool, dry, well-ventilated place. Keep containers tightly closed. Do not store near heat, flame, or other potential ignition sources. Do not store with oxidizers. Do not store in unlabeled containers. Ground all equipment containing this material. Store and transport in accordance with all applicable laws.
- Incompatible products : Strong acids, strong bases, strong oxidizers.

### 7.3. Specific end use(s)

Ideal for providing lubricious and/or hydrophobic coating. For professional use only.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

### 8.2. Exposure controls

- Appropriate engineering controls : Gas detectors should be used when flammable gases/vapors may be released. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Ensure all national/local regulations are observed.
- Personal protective equipment : Insufficient ventilation: wear respiratory protection. Full protective flameproof clothing. Protective goggles. Gloves.



- Materials for protective clothing : Wear fire/flame resistant/retardant clothing.
- Hand protection : Impermeable protective gloves. Wear chemically resistant protective gloves.
- Eye protection : Chemical goggles or face shield.
- Skin and body protection : Wear fireproof clothing.
- Respiratory protection : Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.
- Environmental exposure controls : Do not allow the product to be released into the environment.
- Consumer exposure controls : Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Colorless
- Odor : Characteristic
- Odor threshold : No data available
- pH : No data available
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : No data available

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Freezing point	: No data available
Boiling point	: No data available
Flash point	: -1 °C (30°F)
Auto-ignition Temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Specific Gravity	: 0.75
Solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Viscosity	: No data available

### 9.2. Other information

VOC content : 100 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Direct sunlight, extremely high or low temperatures, open flames, sources of ignition and incompatible materials.

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizers.

### 10.6. Hazardous decomposition products

Oxides of silicon and carbon. When heated to decomposition it emits acrid smoke, fumes.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Hexamethyldisiloxane (107-46-0)	
LD50 oral rat	> 5000 mg/kg
LC50 inhalation rat (ppm)	15956 ppm/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Repeated or prolonged exposure is likely to cause irritation.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely irritating.

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Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.  
Chronic symptoms : None expected under normal conditions of use.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

#### Hexamethyldisiloxane (107-46-0)

LC50 fish l	3.02 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
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### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

#### Hexamethyldisiloxane (107-46-0)

BCF fish l	1300
Log Pow	4.2

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

## SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

### 14.1. UN number

UN-No.(DOT) : 1993  
DOT NA no. : UN1993

### 14.2. UN proper shipping name

DOT Proper Shipping Name : Flammable liquids, n.o.s., (Hexamethyldisiloxane)  
Department of Transportation : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120  
(DOT) Hazard Classes  
Hazard labels (DOT) : 3 - Flammable liquid



DOT Symbols : G - Identifies PSN requiring a technical name  
Packing group (DOT) : I - Great Danger

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DOT Special Provisions (49 CFR 172.102)	: IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F). TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
Marine pollutant	: Marine pollutant



### 14.3. Additional information

Emergency Response Guide (ERG) Number	: 128
Other information	: No supplementary information available.

#### Transport by sea

DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
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MFAG-No : 127;128

#### Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<b>MP5188</b>	
SARA Section 311/312 Hazard Classes	Fire hazard
<b>Hexamethyldisiloxane (107-46-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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### 15.2. US State regulations

#### Hexamethyldisiloxane (107-46-0)

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

## SECTION 16: Other information, including date of preparation or last revision

Revision date : 09/09/2015

Other information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Full text of H-phrases: see section 16:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Flam. Liq. 1	Flammable liquids Category 1
H224	Extremely flammable liquid and vapor
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

NFPA health hazard

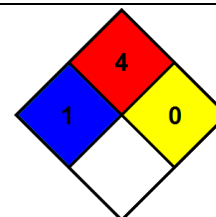
1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.

NFPA reactivity

0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



*We believe that the information contained herein is current as of the date of this Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of NuSil Technology, it is the user's obligation to determine the conditions of safe use of the product.*

SDS US (GHS HazCom 2012) - US