# **MED-4174**



# Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 09/08/2022 Date of Issue: 02/09/2015

Version 5.0

#### **SECTION 1: Identification**

#### 1.1. Product Identifier

Product Form Mixture
Product Name MED-4174

Synonyms Silicone Elastomer

## 1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Use of the Substance/Mixture 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

productstewardship@avantorsciencesgcc.com

www.nusil.com

### 1.4. Emergency Telephone Number

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

Number and Maritime)

#### **SECTION 2: Hazards Identification**

#### 2.1. Classification of the Substance or Mixture

#### **GHS-US Classification**

Reproductive toxicity Category 2 H361 Hazardous to the aquatic environment - Chronic Hazard Category 2 H411

#### 2.2. Label Elements

#### **GHS-US Labeling**

Hazard Pictograms (GHS-US)





GHS08 Warning

GHS09

Signal Word (GHS-US)

Hazard Statements (GHS-US)

H361 - Suspected of damaging fertility or the unborn child

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements (GHS- P201 - Obtain special instructions before use.

US)

P202 - Do not handle until all safety precautions have been

read and understood.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye

protection.

P308+P313 - If exposed or concerned: Get medical

advice/attention. P391 - Collect spillage. P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local,

regional, national, and international regulations.

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#### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory Other Hazards Not Contributing to the Classification conditions.

#### **Unknown Acute Toxicity (GHS-US)** 2.4.

20 - 30% of the mixture consists of ingredients of unknown acute toxicity.

# **SECTION 3: Composition/Information On Ingredients**

#### 3.1. Substances

Not applicable

#### **Mixtures** 3.2.

Name	Product Identifier	<b>%</b> *	GHS-US Classification
Octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2	0.1 - 1	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 1, H410
Decamethylcyclopentasiloxane	(CAS-No.) 541-02-6	0.1 - 1	Flam. Liq. 4, H227

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 where

possible).

First-aid Measures After When symptoms occur: go into open air and ventilate

suspected area. Obtain medical attention if breathing difficulty Inhalation

persists.

First-aid Measures After Skin

Contact

Remove contaminated clothing. Drench affected area with water for at least 5 minutes. If exposed or concerned: Get

medical advice/attention.

First-aid Measures After Eye

Contact

Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

First-aid Measures After Rinse mouth. Do NOT induce vomiting. Obtain medical Ingestion attention.

Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries Suspected of damaging fertility or the unborn child.

Symptoms/Injuries After Prolonged exposure may cause irritation.

Inhalation

Symptoms/Injuries After Skin

Contact

Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye

May cause slight irritation to eyes.

Contact

Symptoms/Injuries After

Ingestion

Ingestion may cause adverse effects.

Chronic Symptoms Suspected of damaging fertility or the unborn child.

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<sup>\*</sup>The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

# **SECTION 5: Fire-Fighting Measures**

Extinguishing Media 5.1.

Suitable Extinguishing Media : Water spray, fog, carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam,

or dry chemical.

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 Not considered flammable but may burn at high temperatures.

**Explosion Hazard** Product is not explosive.

Hazardous reactions will not occur under normal conditions. Reactivity

**Advice for Firefighters** 

Precautionary Measures Fire Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Firefighting Instructions

Protection During Firefighting Do not enter fire area without proper protective equipment,

including respiratory protection.

Oxides of silicon and carbon. Formaldehyde.

Hazardous Combustion

**Products** 

Other Information Do not allow run-off from fire fighting to enter drains or water

courses.

#### **SECTION 6: Accidental Release Measures**

#### 6.1. Personal Precautions, Protective Equipment And Emergency Procedures

Do not get in eyes, on skin, or on clothing. Do not breathe dust. General Measures

6.1.1. For Non-Emergency Personnel

Protective Equipment Use appropriate personal protective equipment (PPE).

**Emergency Procedures** Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective Equipment Equip cleanup crew with proper protection.

**Emergency Procedures** Upon arrival at the scene, a first responder is expected to

> recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

#### **Environmental Precautions** 6.2.

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment Contain solid spills with appropriate barriers and prevent

migration and entry into sewers or streams.

Clean up spills immediately and dispose of waste safely. Methods for Cleaning Up

Recover the product by vacuuming, shoveling or sweeping. Transfer spilled material to a suitable container for disposal.

Contact competent authorities after a spill.

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#### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

# **SECTION 7: Handling And Storage**

#### 7.1. Precautions for Safe Handling

Additional Hazards When Will decompose above 150 °C (> 300 °F) releasing

Processed formaldehyde vapors.

Precautions for Safe Handling Obtain special instructions before use. Do not handle until all

safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene Measures Handle in accordance with good industrial hygiene and safety

procedures.

## 7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures Comply with applicable regulations.

Storage Conditions Keep container closed when not in use. Store in a dry, cool

place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked

up/in a secure area.

Incompatible Materials Strong acids, strong bases, strong oxidizers.

**7.3. Specific End Use(S)** 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), or OSHA (PEL).

#### 8.2. Exposure Controls

Appropriate Engineering Suitable eye/body wash equipment should be available in the Vicinity of any potential exposure. Ensure adequate ventilation,

especially in confined areas. Ensure all national/local

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regulations are observed.

Personal Protective Equipment Gloves. Protective clothing. Insufficient ventilation: wear

respiratory protection. Protective goggles or glasses.







Chemically resistant materials and fabrics.



Materials For Protective

Clothina

Hand Protection Wear protective gloves.

Eye And Face Protection Goggles or safety glasses with side-shields.

Skin And Body Protection Wear suitable protective clothing.

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Respiratory Protection If exposure limits are exceeded or irritation is experienced,

approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved

respiratory protection.

Other Information When using, do not eat, drink or smoke.

# **SECTION 9: Physical and Chemical Properties**

## 9.1. Information on Basic Physical and Chemical Properties

Physical State Solid

Appearance Colorless gum
Odor Odorless

Odor Threshold No data available Hq No data available **Evaporation Rate** No data available **Melting Point** No data available Freezing Point No data available **Boiling Point** No data available Flash Point > 135 °C (275 °F) **Auto-ignition Temperature** No data available **Decomposition Temperature** No data available Flammability No data available Vapor Pressure No data available Relative Vapor Density at 20°C No data available

Relative Density No Specific Gravity > 1

Solubility
Partition Coefficient n-Octanol/Water
Viscosity

No data available
No data available
No data available

#### 9.2. Other Information

VOC Content < 1 %

# **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, and incompatible materials.

#### 10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

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No data available

#### 10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Oxides of silicon and carbon. Will decompose above 150 °C (>300° F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

# **SECTION 11: Toxicological Information**

## 11.1. Information on Toxicological Effects

Acute Toxicity (Oral)

Acute Toxicity (Dermal)

Acute Toxicity (Inhalation)

Not classified

Not classified

Octamethylcyclotetrasiloxane (556-67-2)	
LD50 Oral Rat	> 4800 mg/kg (No mortality)
LD50 Dermal Rat	> 2375 mg/kg
LD50 Dermal Rabbit	> 2.5 ml/kg (No mortality)
LC50 Inhalation Rat	36 mg/l/4h

Decamethylcyclopentasiloxane	(541-02-6)
LD50 Oral Rat	> 5000 mg/kg (Species: Sprague-Dawley)
LD50 Dermal Rabbit	> 2000 mg/kg (Species: New Zealand White) No deaths reported
LC50 Inhalation Rat	8.67 mg/l/4h (Species: Fischer)

Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Not classified
,	Not classified
Respiratory or Skin Sensitization	
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified

Reproductive Toxicity Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity Not classified

(Single Exposure)

Ingestion

Specific Target Organ Toxicity Not classified (Repeated Exposure)

Aspiration Hazard Not classified

Symptoms/Injuries After Prolonged exposure may cause irritation.

Inhalation

Symptoms/Injuries After Skin Prolonged exposure may cause skin irritation.

Contact

Symptoms/Injuries After Eye May cause slight irritation to eyes.

Contact

Symptoms/Injuries After Ingestion may cause adverse effects.

Chronic Symptoms Suspected of damaging fertility or the unborn child.

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# **SECTION 12: Ecological Information**

### 12.1. Toxicity

Ecology - General Toxic to aquatic life with long lasting effects.

Octamethylcyclotetrasiloxane (556-67-2)	
LC50 Fish 1	> 22 µg/l
NOEC Chronic Fish	0.0044 mg/l

### 12.2. Persistence and Degradability

MED-4174	
Persistence and Degradability	May cause long-term adverse effects in the environment.

#### 12.3. Bioaccumulative Potential

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MED-4174	
Bioaccumulative Potential	Not established.
Octamethylcyclotetrasiloxane (556-67-2)	
BCF Fish 1	(12400 dimensionless)
Partition coefficient n-	6.488 (at 25.1 °C)
octanol/water (Log Pow)	
Decamethylcyclopentasiloxane	(541-02-6)
Partition coefficient n-	8.023 (at 25.3 °C)
octanol/water (Log Pow)	

### 12.4. Mobility In Soil

No additional information available

#### 12.5. Other Adverse Effects

Other Information Avoid release to the environment.

# **SECTION 13: Disposal Considerations**

#### 13.1. Waste Treatment Methods

Waste Disposal Dispose of contents/container in accordance with local,

Recommendations regional, national, and international regulations.

Additional Information Container may remain hazardous when empty. Continue to

observe all precautions.

Ecology - Waste Materials Avoid release to the environment. This material is hazardous to

the aquatic environment. Keep out of sewers and waterways.

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# **SECTION 14: Transport Information**

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

#### 14.1. In Accordance with DOT

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.

(Contains: Octamethylcyclotetrasiloxane)

Hazard Class 9

Identification Number UN3077

Label Codes 9
Packing Group III

Marine Pollutant Marine pollutant

ERG Number 171

### 14.2. In Accordance with IMDG

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Contains: Octamethylcyclotetrasiloxane)

Hazard Class 9

Identification Number UN3077

Packing Group III
Label Codes 9
EmS-No. (Fire) F-A
EmS-No. (Spillage) S-F

Marine Pollutant Marine pollutant

#### 14.3. In Accordance with IATA

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Contains: Octamethylcyclotetrasiloxane)

Packing Group III

Identification Number UN3077

Hazard Class 9 Label Codes 9 ERG Code (IATA) 9L



# **SECTION 15: Regulatory Information**

## 15.1. US Federal Regulations

All components in this mixture are listed on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, have been exempted, are not listed, not disclosed due to CBI requirements or disclosure rules according to the relevant regulation.

·	<u> </u>
MED-4174	
SARA Section 311/312 Hazard	Health hazard - Reproductive toxicity
Classes	

#### 15.2. US State Regulations

Octamethylcyclotetrasiloxane (556-67-2)
U.S Texas - Effects Screening Levels - Long Term
U.S Texas - Effects Screening Levels - Short Term

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- U.S. Maine Chemicals of Concern
- U.S. Oregon Priority Persistent Pollutant Tier I Persistent Pollutants
- U.S. Minnesota Chemicals of High Concern
- U.S. Minnesota Chemicals of High Concern Persistent Bioaccumulative Toxins
- U.S. California Safer Consumer Products Initial List of Candidate Chemicals and Chemical Groups

#### Decamethylcyclopentasiloxane (541-02-6)

- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Maine Chemicals of Concern
- U.S. Oregon Priority Persistent Pollutant Tier I Persistent Pollutants
- U.S. Minnesota Chemicals of High Concern
- U.S. Minnesota Chemicals of High Concern Persistent Bioaccumulative Toxins
- U.S. California Safer Consumer Products Initial List of Candidate Chemicals and Chemical Groups

# SECTION 16: Other Information, Including Date of Preparation or Last Revision

Date of Preparation or Latest

Revision

09/08/2022

Other Information

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29

CFR 1910.1200.

## GHS Full Text Phrases:

Flam. Liq. 3	Flammable Liquids Category 3
Flam. Liq. 4	Flammable Liquids Category 4
Repr. 2	Reproductive Toxicity Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
H226	Flammable liquid and vapor
H227	Combustible liquid
H361	Suspected of damaging fertility or the unborn child
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

NFPA Health Hazard 1 - Materials that, under emergency

conditions, can cause significant irritation.

NFPA Fire Hazard 1 - Materials that must be preheated

before ignition can occur.

0 - Material that in themselves are NFPA Reactivity Hazard

normally stable, even under fire

conditions.

**HMIS III Rating** 

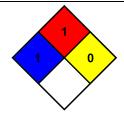
Health 1 Slight Hazard

\* Chronic - Chronic (long-term) health effects may result from

repeated overexposure

Flammability 1 Slight Hazard 0 Minimal Hazard Physical

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