MED-2000





Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 02/14/2024 Date of issue: 08/26/2014

Version: 5.0

SECTION 1: Identification

1.1. Product Identifier

Product Form Mixture
Product Name MED-2000

Synonyms Silicone Adhesive

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)

Number +1 703-527-3887 CHEMTREC (International and Maritime)

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

GHS-US Classification

Skin Irrit. 2 H315 Eye Dam. 1 H318 Repr. 2 H361 Aquatic Chronic 3 H412

Full text of hazard classes and H-statements: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)





GHS05 GHS08

Signal Word (GHS-US) Danger

Hazard Statements (GHS-US) H315 - Causes skin irritation

H318 - Causes serious eye damage

H361 - Suspected of damaging fertility or the unborn child H412 - Harmful to aquatic life with long lasting effects

02/14/2024 EN (English US) 1/11

Precautionary Statements (GHS-US)

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

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

P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P310 - Immediately call a poison center or doctor. P321 - Specific treatment (see section 4 on this SDS). P332+P313 - If skin irritation occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Other Hazards Not Contributing to the Classification

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No additional information available

SECTION 3: Composition/Information On Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product Identifier	%	GHS-US Classification
Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica	(CAS-No.) 68909-20-6	20 - 30	Not classified
Silanetriol, ethyl-, triacetate	(CAS-No.) 17689-77-9	< 5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318
Octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2	< 0.25	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 1, H410
Stannane, dioctylbis[(1- oxododecyl)oxy]-	(CAS-No.) 3648-18-8	< 0.1	Repr. 1B, H360 STOT SE 2, H371 STOT RE 1, H372

Full text of H-phrases: see section 16

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

02/14/2024 EN (English US) 2/11

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

Inhalation suspected area. Obtain medical attention if breathing difficulty

persists.

First-aid Measures After Skin

Contact

Remove contaminated clothing. Immediately drench affected

area with water for at least 15 minutes. Obtain medical

attention if irritation develops or persists.

First-aid Measures After Eye

Contact

Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get

immediate medical advice/attention.

First-aid Measures After Rinse mouth. Do NOT induce vomiting. Obtain emergency

Ingestion medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries Causes skin irritation. Causes serious eye damage. Suspected of

damaging fertility or the unborn child Prolonged exposure may cause irritation.

Symptoms/Injuries After

Inhalation

-

Symptoms/Injuries After Skin

Contact

Redness, pain, swelling, itching, burning, dryness, and

Causes permanent damage to the cornea, iris, or conjunctiva.

dermatitis.

Symptoms/Injuries After Eye

Contact

Ingestion may cause adverse effects.

Symptoms/Injuries After

Chronic Symptoms

Inaestion

Suspected of damaging fertility or the unborn child.

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

5.1. Extinguishing Media

Suitable Extinguishing Media : Carbon dioxide, dry chemical, foam.

Unsuitable Extinguishing Media : Water.

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.

Reactivity May hydrolyze with water to form acetic acid.

5.3. Advice for Firefighters

Precautionary Measures Fire Exercise caution when fighting any chemical fire.

Firefighting Instructions

Fight fire with normal precautions from a reasonable distance.

Protection During Firefighting

Do not enter fire area without proper protective equipment,

including respiratory protection.

Hazardous Combustion

Products

Carbon oxides (CO, CO₂). Formaldehyde. Silicon oxides.

02/14/2024 EN (English US) 3/11

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

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

General Measures Do not breathe vapor, mist or spray. Do not get in eyes, on skin,

or on clothing.

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.

6.2. Environmental Precautions

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

6.3. Methods and Materials for Containment and Cleaning Up

For Containment Contain any spills with dikes or absorbents to prevent migration

and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all

directions.

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

Transfer spilled material to a suitable container for disposal.

Contact competent authorities after a spill.

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 breathe vapors, mist, and spray. Wash hands and other exposed areas with mild soap and water before eating,

drinking or smoking and when leaving work. Do not get in eyes,

on skin, or on clothing. Handle empty containers with care

because they may still present a hazard.

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.

02/14/2024 EN (English US) 4/1

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 in original container or corrosive resistant and/or lined container. Store

locked up/in a secure area.

Incompatible Materials

Specific End Use(s)

For professional use only

Strong acids, strong bases, strong oxidizers. Water.

SECTION 8: Exposure Controls/Personal Protection

Control Parameters 8.1.

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).

1 /	1 7	
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica (68909-20-6)		
USA OSHA	OSHA PEL TWA	6 mg/m³
USA OSHA	OSHA PEL TWA	20 mppcf (80mg/m³/%SiO ₂)
Tin organic c	compounds	
USA ACGIH	ACGIH OEL TWA	0.1 mg/m³
USA ACGIH	ACGIH OEL STEL	0.2 mg/m³
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA NIOSH	NIOSH REL TWA	0.1 mg/m³ (except Cyhexatin)
USA OSHA	OSHA PEL TWA	0.1 mg/m³
Octamethyl	cyclotetrasiloxane (556-67-2)	
USA AIHA	WEEL TWA	10 ppm

8.2. **Exposure Controls**

Appropriate Engineering

Controls

Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protective Equipment

Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.









Materials For Protective Clothing

Hand Protection Eye And Face Protection Skin And Body Protection Respiratory Protection

Other Information

Chemically resistant materials and fabrics.

Wear protective gloves. Chemical safety goggles.

Wear suitable protective clothing.

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.

When using, do not eat, drink or smoke.

02/14/2024 EN (English US)

SECTION 9: Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Physical State Liquid

Appearance Colorless paste
Odor Acetic acid

Odor Threshold No data available На 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 (solid, gas) Not applicable Vapor Pressure No data available Relative Vapor Density at 20°C No data available Relative Density > 1 (water=1) Specific Gravity No data available

Specific Gravity

Solubility

Partition Coefficient n-Octanol/Water

Viscosity

No data available

No data available

No data available

No data available

9.2. Other Information

VOC Content < 1 %

SECTION 10: Stability and Reactivity

10.1. Reactivity

May hydrolyze with water to form acetic acid.

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. Moisture.

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers. Water.

10.6. Hazardous Decomposition Products

Decomposes on exposure to water to form acetic acid. Thermal decomposition may produce: Carbon oxides (CO, CO₂). Silicon oxides. 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) Not classified Acute Toxicity (Dermal) Not classified

02/14/2024 EN (English US) 6/1

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

Acute Toxicity (Inhalation) Not	classified
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Silanetriol, ethyl-, triacetate (17689-77-9)	
LD50 Oral Rat	1460 mg/kg
Stannane, dioctylbis[(1-oxodode	-cyl)oxy]- (3648-18-8)
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
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

Skin Corrosion/Irritation Causes skin irritation.

Serious Eye Damage/Irritation Causes serious eye damage.

Respiratory or Skin Sensitization Not classified Germ Cell Mutagenicity Carcinogenicity Not classified

Reproductive Toxicity Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity

(Single Exposure)

Specific Target Organ Toxicity

(Repeated Exposure)

Aspiration Hazard

Symptoms/Injuries After

Inhalation

Symptoms/Injuries After Skin

Contact

Symptoms/Injuries After Eye

Contact

Symptoms/Injuries After

Ingestion

Chronic Symptoms

Not classified

Not classified

Not classified

Not classified

Prolonged exposure may cause irritation.

Redness, pain, swelling, itching, burning, dryness, and

Causes permanent damage to the cornea, iris, or conjunctiva.

dermatitis.

Ingestion may cause adverse effects.

Suspected of damaging fertility or the unborn child.

SECTION 12: Ecological Information

12.1. Toxicity

Ecology - General Harmful 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-2000	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

MED-2000		
Bioaccumulative Potential	Not established.	
Octamethylcyclotetrasiloxane (556-67-2)		
BCF Fish	12400	

02/14/2024 EN (English US)

MED-2000

Safety Data Sheet

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

Partition coefficient n-	6.488 (at 25.1 °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.

Ecology - Waste Materials This material is hazardous to the aquatic environment. Keep

out of sewers and waterways. Avoid release to the

environment.

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 Not regulated for transport
14.2. In Accordance with IMDG Not regulated for transport
14.3. In Accordance with IATA Not regulated for transport

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.

MED-2000	
SARA Section 311/312 Hazard	Health hazard - Reproductive toxicity
Classes	Health hazard - Serious eye damage or eye irritation
	Health hazard - Skin corrosion or Irritation

15.2. US State Regulations

	Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica (68909-20-6)	
U.S Texas - Effects Screening Levels - Long Term		
	U.S Texas - Effects Screening Levels - Short Term	
	Silanetriol, ethyl-, triacetate (17689-77-9)	
	U.S Texas - Effects Screening Levels - Long Term	
	U.S Texas - Effects Screening Levels - Short Term	
	Tin organic compounds	

02/14/2024 EN (English US) 8/11

- U.S. Minnesota Hazardous Substance List
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Tennessee Occupational Exposure Limits Skin Designations
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Vermont Permissible Exposure Limits Skin Designations
- U.S. Washington Permissible Exposure Limits TWAs
- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits Skin Designations
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Emission Levels (ELs)
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. New York Occupational Exposure Limits TWAs
- U.S. New York Occupational Exposure Limits Skin Designations
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Michigan Occupational Exposure Limits Skin Designations
- U.S. Minnesota Permissible Exposure Limits Skin Designations
- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. Oregon Permissible Exposure Limits TWAs
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 75 Feet or Greater
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 40 Feet to Less Than 75 Feet
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 25 Feet to Less Than 40 Feet
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights Less Than 25 Feet
- U.S. North Dakota Air Pollutants Guideline Concentrations 1-Hour
- U.S. North Dakota Air Pollutants Guideline Concentrations 8-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) 24-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) Annual

Octamethylcyclotetrasiloxane (556-67-2)

- 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

02/14/2024

Revision

Other Information

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

02/14/2024 EN (English US) 9/11

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Flam. Liq. 3	Flammable liquids Category 3
Repr. 1B	Reproductive toxicity Category 1B
Repr. 2	Reproductive toxicity Category 2
Skin Corr. 1C	Skin corrosion/irritation Category 1C
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 2	Specific target organ toxicity (single exposure) Category 2
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H360	May damage fertility or the unborn child
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H371	May cause damage to organs
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA Health Hazard

3 - Materials that, under emergency

conditions, can cause serious or

permanent injury.

NFPA Fire Hazard 1 - Materials that must be preheated

before ignition can occur.

NFPA Reactivity Hazard 0 - Material that in themselves are

normally stable, even under fire

conditions.

HMIS III Rating

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

repeated overexposure

Flammability 1 Slight Hazard
Physical 0 Minimal Hazard

02/14/2024 EN (English US) 10/11

MED-2000

Safety Data Sheet

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

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02/14/2024 EN (English US) 11/1