

# CF2-3521-2 Part A

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Date of Revision: 10/16/2023 Date of Issue: 08/19/2014

Version: 4.0

### SECTION 1: Identification

#### 1.1. Product Identifier

Product Form Mixture  
Product Name CF2-3521-2 Part A  
Synonyms Fluorosilicone 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](mailto:productstewardship@avantorsciencesgcc.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

##### GHS-US Classification

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)



GHS08

Signal Word (GHS-US)

Warning

Hazard Statements (GHS-US)

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

Precautionary Statements (GHS-US)

P201 - Obtain special instructions before use.  
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.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

# CF2-3521-2 Part A

## Safety Data Sheet

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

## SECTION 3: Composition/Information On Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixture

Name	Product Identifier	%	GHS-US Classification
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	(CAS No) 68909-20-6	10 - 30	Not classified
Titanium dioxide	(CAS No) 13463-67-7	< 1	Not classified
2,4,6-trimethyl-2,4,6-tris(3,3,3-trifluoropropyl)cyclotrisiloxane	(CAS-No.) 2374-14-3	< 0.25	Repr. 2, H361 STOT RE 1, H372 STOT RE 2, H373
Octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2	< 0.25	Flam. Liq. 3, H226 Repr. 2, H361 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 where possible).
First-aid Measures After Inhalation	When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
First-aid Measures After Skin Contact	Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.
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. Do NOT induce vomiting. Obtain medical attention.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries	Suspected of damaging fertility or the unborn child.
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	May cause slight irritation to eyes.

# CF2-3521 -2 Part A

## Safety Data Sheet

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

Symptoms/Injuries After  
Ingestion

Ingestion may cause adverse effects.

Chronic Symptoms

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 : Water spray, dry chemical, foam, 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 Not considered flammable but may burn at high temperatures.

Explosion Hazard Product is not explosive.

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.

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

#### 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.

### 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.

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.

# CF2-3521-2 Part A

## Safety Data Sheet

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

### SECTION 7: Handling And Storage

#### 7.1. Precautions for Safe Handling

Precautions for Safe Handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. 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 (vapor, mist, spray).

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.

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).

<b>Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica (68909-20-6)</b>		
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	20 mppcf (80 mg/m <sup>3</sup> /%SiO <sub>2</sub> )
<b>Titanium dioxide (13463-67-7)</b>		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (total dust)
<b>Octamethylcyclotetrasiloxane (556-67-2)</b>		
USA AIHA	WEEL TWA	10 ppm

#### 8.2. Exposure Controls

Appropriate Engineering Controls

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

Personal Protective Equipment

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



Materials For Protective Clothing

Chemically resistant materials and fabrics.

Hand Protection

Wear protective gloves.

# CF2-3521 -2 Part A

## Safety Data Sheet

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

---

Eye And Face Protection	Chemical safety goggles.
Skin And Body Protection	Wear suitable protective clothing.
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	Liquid
Appearance	Black
Odor	Odorless
Odor Threshold	No data available
pH	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
Solubility	No data available
Partition Coefficient n-Octanol/Water	No data available
Viscosity	No data available

### 9.2. Other Information

No additional information available

## 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.

# CF2-3521-2 Part A

## Safety Data Sheet

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

### 10.6. Hazardous Decomposition Products

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 : Not classified

<b>2,4,6-trimethyl-2,4,6-tris(3,3,3-trifluoropropyl)cyclotrisiloxane (CAS 2374-14-3)</b>	
LD50 oral rat	4659 mg/kg

<b>Octamethylcyclotetrasiloxane (556-67-2)</b>	
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 : Not classified  
Serious Eye Damage/Irritation : Not classified  
Respiratory or Skin Sensitization : Not classified  
Germ Cell Mutagenicity : Not classified  
Carcinogenicity : Not classified

<b>Titanium dioxide (13463-67-7)</b>	
IARC group	2B
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity : Suspected of damaging fertility or the unborn child.  
Specific Target Organ Toxicity (Single Exposure) : Not classified  
Specific Target Organ Toxicity (Repeated Exposure) : Not classified  
Aspiration Hazard : Not classified  
Symptoms/Injuries After Inhalation : Prolonged exposure may cause irritation.  
Symptoms/Injuries After Skin Contact : Prolonged exposure may cause skin irritation.  
Symptoms/Injuries After Eye Contact : May cause slight irritation to eyes.  
Symptoms/Injuries After Ingestion : Ingestion may cause adverse effects.  
Chronic Symptoms : 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

# CF2-3521-2 Part A

## Safety Data Sheet

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

### Titanium dioxide (13463-67-7)

LC50 fish 1	> 1000 ml/l (Exposure Time: 96h - Species: Pimephales promelas (static))
-------------	--

### Octamethylcyclotetrasiloxane (556-67-2)

LC50 Fish	> 22 µg/l
NOEC Chronic Fish	0.0044 mg/l

## 12.2. Persistence and Degradability

### CF2-3521-2 Part A

Persistence and Degradability	Not established.
-------------------------------	------------------

## 12.3. Bioaccumulative Potential

### CF2-3521-2 Part A

Bioaccumulative Potential	Not established.
---------------------------	------------------

### Octamethylcyclotetrasiloxane (556-67-2)

BCF Fish 1	12400
Log Pow	5.1

## 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 Recommendations	Dispose of contents/container in accordance with local, regional, national, and international regulations.
Additional Information	Container may remain hazardous when empty. Continue to observe all precautions.
Ecology - Waste Materials	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, or are not disclosed due to CBI requirements or disclosure rules according to the relevant regulation.

### CF2-3521-2 Part A

SARA Section 311/312 Hazard Classes	Health hazard - Reproductive toxicity
-------------------------------------	---------------------------------------

## CF2-3521-2 Part A

### Safety Data Sheet

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

#### 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

##### **Titanium dioxide (13463-67-7)**

U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)  
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)  
U.S. - Idaho - Occupational Exposure Limits - TWAs  
U.S. - Illinois - Toxic Air Contaminant Carcinogens  
RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Michigan - Occupational Exposure Limits - TWAs  
U.S. - Minnesota - Chemicals of High Concern  
U.S. - Minnesota - Hazardous Substance List  
U.S. - Minnesota - Permissible Exposure Limits - TWAs  
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  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New York - Occupational Exposure Limits - TWAs  
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour  
U.S. - Oregon - Permissible Exposure Limits - TWAs  
U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Tennessee - Occupational Exposure Limits - TWAs  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Vermont - Permissible Exposure Limits - TWAs  
U.S. - Washington - Permissible Exposure Limits - STELs  
U.S. - Washington - Permissible Exposure Limits - TWAs

##### **Titanium dioxide (13463-67-7)**

U.S. - California - Proposition 65 - Carcinogens List

WARNING: This product contains chemicals known to the State of California to cause cancer.

##### **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 Revision      10/16/2023



# CF2-3521-2 Part A

## Safety Data Sheet

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

### 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:

Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Flam. Liq. 3	Flammable liquids Category 3
Repr. 2	Reproductive toxicity Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H226	Flammable liquid and vapor
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure (Oral)
H373	May cause damage to organs through prolonged or repeated exposure (dermal)
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

### NFPA Health Hazard

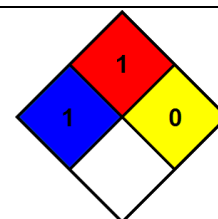
1 - Materials that, under emergency conditions, can cause significant irritation.

### NFPA Fire Hazard

1 - Materials that must be preheated before ignition can occur.

### NFPA Reactivity Hazard

0 - Material that in themselves are normally stable, even under fire conditions.



### HMIS III Rating

#### Health

1 Slight Hazard - Irritation or minor reversible injury possible  
\* Chronic - Chronic (long-term) health effects may result from repeated overexposure

#### Flammability

1 Slight Hazard

#### Physical

0 Minimal Hazard

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL TECHNOLOGY LLC AND ITS AFFILIATED COMPANIES ("NUSIL") EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of NuSil's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL DISCLAIMS LIABILITY FOR, AND BY USING NUSIL'S PRODUCTS PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL NUSIL BE LIABLE FOR, SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.

NuSil US GHS SDS

# CF2-3521-2 Part B

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Date of Revision: 10/16/2023 Date of Issue: 08/19/2014

Version: 3.0

### SECTION 1: Identification

#### 1.1. Product Identifier

Product Form	Mixture
Product Name	CF2-3521-2 Part B
Synonyms	Fluorosilicone 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](mailto:productstewardship@avantorsciencesgcc.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

##### GHS-US Classification

Repr. 1B	H360
----------	------

Aquatic Chronic 3	H412
-------------------	------

Full text of hazard classes and H-statements: see section 1.6

#### 2.2. Label Elements

##### GHS-US Labeling

Hazard Pictograms (GHS-US)



GHS08

Signal Word (GHS-US)

Danger

Hazard Statements (GHS-US)

H360 - May damage fertility or the unborn child  
H412 - Harmful to aquatic life with long-lasting effects

Precautionary Statements (GHS-US)

P201 - Obtain special instructions before use.  
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.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

## CF2-3521-2 Part B

### Safety Data Sheet

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

### SECTION 3: Composition/Information On Ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixture

Name	Product Identifier	%	GHS-US Classification
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	(CAS No) 68909-20-6	10 - 30	Not classified
Siloxanes and Silicones, dimethyl, methyl hydrogen	(CAS No) 68037-59-2	< 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Methyl vinylcyclosiloxane	(CAS-No.) 2554-06-5	< 1	Repr. 1B, H360
2,4,6-trimethyl-2,4,6-tris(3,3,3-trifluoropropyl)cyclotrisiloxane	(CAS-No.) 2374-14-3	< 0.25	Repr. 2, H361 STOT RE 1, H372 STOT RE 2, H373
Octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2	< 0.25	Flam. Liq. 3, H226 Repr. 2, H361 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 where possible).
First-aid Measures After Inhalation	When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
First-aid Measures After Skin Contact	Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.
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. Do NOT induce vomiting. Obtain medical attention.

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries	May damage fertility or the unborn child.
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.

## CF2-3521 -2 Part B

### Safety Data Sheet

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

Symptoms/Injuries After Skin Contact	Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	May damage 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	: Water spray, dry chemical, foam, 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	Not considered flammable but may burn at high temperatures.
Explosion Hazard	Product is not explosive.
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.
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 get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.
------------------	---

##### 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.

#### 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.
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.

# CF2-3521 -2 Part B

## Safety Data Sheet

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

### 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

Precautions for Safe Handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. 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 (vapor, mist, spray).

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.

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).

<b>Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica (68909-20-6)</b>		
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	20 mppcf (80 mg/m <sup>3</sup> /%SiO <sub>2</sub> )
<b>Octamethylcyclotetrasiloxane (556-67-2)</b>		
USA AIHA	WEEL TWA	10 ppm

### 8.2. Exposure Controls

Appropriate Engineering Controls

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

Personal Protective Equipment

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



Materials For Protective Clothing

Chemically resistant materials and fabrics.

Hand Protection

Wear protective gloves.

Eye And Face Protection

Chemical safety goggles.

## CF2-3521-2 Part B

### Safety Data Sheet

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

---

Skin And Body Protection	Wear suitable protective clothing.
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	Liquid
Appearance	Colorless
Odor	Odorless
Odor Threshold	No data available
pH	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
Solubility	No data available
Partition Coefficient n-Octanol/Water	No data available
Viscosity	No data available

### 9.2. Other Information

No additional information available

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

Contact with water, alcohols, acids or bases, and many metals or metallic compounds can liberate flammable Hydrogen gas which can form explosive mixtures in air.

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

Evolved hydrogen gas is flammable and may form explosive mixtures with air.

### 10.4. Conditions to avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

### 10.5. Incompatible materials

Water, alcohols, acids, bases, strong oxidizing agents, catalytic metals, metallic compounds.

## CF2-3521 -2 Part B

### Safety Data Sheet

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

#### 10.6. Hazardous decomposition products

Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product: Flammable hydrogen gas. Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

### SECTION 11: Toxicological Information

#### 11.1. Information on Toxicological Effects

Acute Toxicity : Not classified

<b>Methyl vinylcyclosiloxane (2554-06-5)</b>	
LD50 Oral Rat	> 4800 mg/kg (Read accross, no deaths)
LD50 Dermal Rabbit	> 2000 mg/kg (no deaths)
LC50 Inhalation Rat	> 1.32 mg/l/4h
<b>2,4,6-trimethyl-2,4,6-tris(3,3,3-trifluoropropyl)cyclotrisiloxane (CAS 2374-14-3)</b>	
LD50 oral rat	4659 mg/kg
<b>Octamethylcyclotetrasiloxane (556-67-2)</b>	
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	Not classified
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	: May damage fertility or the unborn child.
Specific Target Organ Toxicity (Single Exposure)	: Not classified
Specific Target Organ Toxicity (Repeated Exposure)	: Not classified
Aspiration Hazard	Not classified
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	May damage fertility or the unborn child.

### SECTION 12: Ecological Information

#### 12.1. Toxicity

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

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

## CF2-3521-2 Part B

### Safety Data Sheet

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

#### 12.2. Persistence and Degradability

<b>CF2-3521-2 Part B</b>	
Persistence and Degradability	Not established.

#### 12.3. Bioaccumulative Potential

<b>CF2-3521-2 Part B</b>	
Bioaccumulative Potential	Not established.

#### Octamethylcyclotetrasiloxane (556-67-2)

BCF Fish 1	12400
Log Pow	5.1

#### 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 Recommendations	Dispose of contents/container in accordance with local, regional, national, and international regulations.
Additional Information	Container may remain hazardous when empty. Continue to observe all precautions.
Ecology - Waste Materials	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, or are not disclosed due to CBI requirements or disclosure rules according to the relevant regulation.

<b>CF2-3521-2 Part B</b>	
SARA Section 311/312 Hazard Classes	Health hazard - Reproductive toxicity

#### 15.2. US State Regulations

<b>Octamethylcyclotetrasiloxane (556-67-2)</b>
--



# CF2-3521 -2 Part B

## Safety Data Sheet

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

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 10/16/2023

Revision

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:

Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Flam. Liq. 3	Flammable liquids Category 3
Repr. 1B	Reproductive toxicity Category 1B
Repr. 2	Reproductive toxicity Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H226	Flammable liquid and vapor
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 (Oral)
H373	May cause damage to organs through prolonged or repeated exposure (dermal)
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful 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.

NFPA Reactivity Hazard

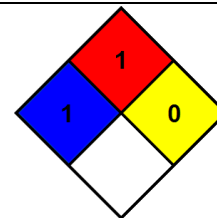
0 - Material that in themselves are normally stable, even under fire conditions.

HMIS III Rating  
Health

1 Slight Hazard - Irritation or minor reversible injury possible  
\* Chronic - Chronic (long-term) health effects may result from repeated overexposure

Flammability  
Physical

1 Slight Hazard  
0 Minimal Hazard



The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL TECHNOLOGY LLC

## CF2-3521-2 Part B

### Safety Data Sheet

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

---

AND ITS AFFILIATED COMPANIES ("NUSIL") EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of NuSil's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL DISCLAIMS LIABILITY FOR, AND BY USING NUSIL'S PRODUCTS PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL NUSIL BE LIABLE FOR, SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.

NuSil US GHS SDS