

CF1-3710-2 Part A

Safety Data Sheet

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

Revision date: 12/21/2023

Date of issue: 09/23/2014

Version: 5.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : CF1-3710-2 Part A
Synonyms : Fluorosilicone Foam

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 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

Reproductive toxicity Category 1B H360
Aquatic Chronic 3 H412

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.

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

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	(CAS No) 68909-20-6	10 - 20	Not classified
Quartz*	(CAS No) 14808-60-7	5 - 10	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372
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	< 1	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

*Finely divided Quartz dust has caused cancer and lung disease in workers that inhale it over an extended period of time. Since this product is in a liquid form, the Quartz dust is not able to become airborne and cannot be inhaled. Thus, the hazards usually associated with Quartz dust are not applicable to this product.

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).
- First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- First-aid measures after skin contact : Rinse immediately with plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse. 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 : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/injuries : May damage fertility or the unborn child.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : May cause eye irritation.
- Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.
- Chronic symptoms : May damage fertility or the unborn child.

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 : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire. Application of water stream to hot product may cause frothing and increase fire intensity.

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.
- Other information : Refer to Section 9 for flammability properties.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

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 : Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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.
- Methods for cleaning up : Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- 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.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
- Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
- Incompatible products : Strong acids. Strong bases. Strong oxidizers.

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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), NIOSH (REL), or OSHA (PEL).

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica (68909-20-6)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	6 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	20 mppcf (80 mg/m ³ /%SiO ₂)
Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable fraction)
USA OSHA	OSHA PEL (STEL) (mg/m ³)	250 mppcf/%SiO ₂ +5, 10 mg/m ³ /%SiO ₂ +2
Octamethylcyclotetrasiloxane (556-67-2)		
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.

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.

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Pale Tan

Odor : Slight

Odor threshold : No data available

pH : No data available

Evaporation Rate : No data available

Melting point : No data available

Freezing point : No data available

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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)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific Gravity	: 1.1 - 1.5
Solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Viscosity	: 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. Ignition sources. Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

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 : Not classified

Quartz (14808-60-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
Methyl vinylcyclosiloxane (2554-06-5)	
LD50 Oral Rat	> 4800 mg/kg (Read across, no deaths)
LD50 Dermal Rabbit	> 2000 mg/kg (no deaths)
LC50 Inhalation Rat	> 1.32 mg/l/4h (Species: Sprague-Dawley, maximum achievable concentration, no deaths)
2,4,6-trimethyl-2,4,6-tris(3,3,3-trifluoropropyl)cyclotrisiloxane (CAS 2374-14-3)	
LD50 oral rat	4659 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	: Not classified

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Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Quartz (14808-60-7)	
IARC group	1
National Toxicity Program (NTP) Status	Known Human Carcinogens.

Reproductive toxicity	: May damage fertility. May damage 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	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: Ingestion is likely to be harmful or have adverse effects.
Chronic symptoms	: May damage fertility. May damage 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	> 22 µg/l
NOEC Chronic Fish	0.0044 mg/l

12.2. Persistence and degradability

CF1-3710-2 Part A	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

CF1-3710-2 Part A	
Bioaccumulative Potential	Not established.

Octamethylcyclotetrasiloxane (556-67-2)	
BCF Fish 1	12400
Log Pow	5.1

Methyl vinylcyclosiloxane (2554-06-5)	
Partition coefficient n-octanol/water (Log Pow)	6.47

No additional information available

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 waste material in accordance with all local, regional, national, and international regulations.

Ecology - waste materials : Avoid release to the environment.

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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** 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.

CF1-3710-2 Part A	
SARA Section 311/312 Hazard Classes	Health hazard - Reproductive toxicity

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	

Quartz (14808-60-7)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Quartz (14808-60-7)	
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations	
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)	
U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts	
U.S. - Illinois - Toxic Air Contaminant Carcinogens	
U.S. - Illinois - Toxic Air Contaminants	
U.S. - Maine - Chemicals of High Concern	
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 Jersey - Special Health Hazards Substances List	
U.S. - New York - Occupational Exposure Limits - Mineral Dusts	
U.S. - New York - Occupational Exposure Limits - TWAs	
U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts	
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	

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

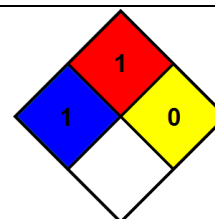
SECTION 16: Other information, including date of preparation or last revision

Revision date : 12/21/2023
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:

Carc. 1A	Carcinogenicity Category 1A
Repr. 1B	Reproductive toxicity Category 1
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
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
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
H335	May cause respiratory irritation
H350	May cause cancer
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
H373	May cause damage to organs through prolonged or repeated exposure (dermal)
H226	Flammable liquid and vapor
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

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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

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Safety Data Sheet

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

Revision date: 12/21/2023

Date of issue: 09/02/2014

Version: 5.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : CF1-3710-2 Part B
Synonyms : Fluorosilicone Foam

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 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.

2.3. Other Hazards

Other Hazards Not Contributing to the Classification

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

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2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	(CAS No) 68909-20-6	10 - 20	Not classified
Quartz*	(CAS No) 14808-60-7	5 - 10	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372
Glass, oxide, chemicals*	(CAS No) 65997-17-3	< 5	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
2,4,6-trimethyl-2,4,6-tris(3,3,3-trifluoropropyl)cyclotrisiloxane	(CAS-No.) 2374-14-3	< 1	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

*Finely divided Quartz and Glass Oxide has caused cancer and lung disease in workers that inhale it over an extended period of time. Since this product is in a liquid form, the Quartz and Glass Oxide is not able to become airborne and cannot be inhaled. Thus, the hazards usually associated with Quartz and Glass oxide are not applicable to this product.

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).
- First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- First-aid measures after skin contact : Rinse immediately with plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse. 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 : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

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 : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : May cause eye irritation.
- Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.
- Chronic symptoms : Suspected of damaging fertility or the unborn child.

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

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

SECTION 5: Fire-Fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire. Application of water stream to hot product may cause frothing and increase fire intensity.

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. In case of major fire and large quantities: 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.
Other information : Refer to Section 9 for flammability properties.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

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 : Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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.
Methods for cleaning up : Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

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- Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
- Incompatible products : Strong acids. Strong bases. Strong oxidizers.

7.3. Specific end use(s)

For professional use only. For use as a solvent resistant seal, and in shock and vibration dampening situations.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica (68909-20-6)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	6 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	20 mppcf (80 mg/m ³ /%SiO ₂)
Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³
USA OSHA	OSHA PEL (STEL) (mg/m ³)	250 mppcf/%SiO ₂ +5, 10 mg/m ³ /%SiO ₂ +2
Glass, oxide, chemicals (65997-17-3)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ total dust, 5 mg/m ³ , respirable fraction 8 hr
Octamethylcyclotetrasiloxane (556-67-2)		
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.
- 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.
- 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Dark Grey
- Odor : Slight

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Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: 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)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Specific Gravity	: 1.10-1.15
Solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Viscosity	: No data available

9.2. Other information

VOC Content <1%

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. Ignition sources. Incompatible materials.

10.5. Incompatible materials

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

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.

Quartz (14808-60-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
2,4,6-trimethyl-2,4,6-tris(3,3,3-trifluoropropyl)cyclotrisiloxane (CAS 2374-14-3)	
LD50 oral rat	4659 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

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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.

Quartz (14808-60-7)	
IARC group	1
National Toxicity Program (NTP) Status	Known Human Carcinogens.

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 irritation to eyes.
Symptoms/injuries after ingestion	: Ingestion is likely to be harmful or have 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.

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

12.2. Persistence and Degradability

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

12.3. Bioaccumulative Potential

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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 waste material in accordance with all local, regional, national, and international regulations.

Ecology - waste materials : Avoid release to the environment.

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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** 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.

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

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	
Quartz (14808-60-7)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
Quartz (14808-60-7)	
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations	
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)	
U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts	
U.S. - Illinois - Toxic Air Contaminant Carcinogens	
U.S. - Illinois - Toxic Air Contaminants	
U.S. - Maine - Chemicals of High Concern	
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 Jersey - Special Health Hazards Substances List	
U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts	
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	
Glass, oxide, chemicals (65997-17-3)	
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)	
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)	
U.S. - Minnesota - Hazardous Substance List	
U.S. - Texas - Effects Screening Levels - Long Term	

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U.S. - Texas - Effects Screening Levels - Short Term
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs

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

Revision date : 12/21/2023
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:

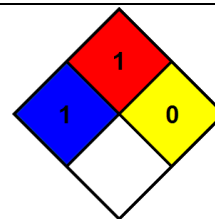
Carc. 1A	Carcinogenicity Category 1A
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
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
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H350	May cause cancer
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)
H226	Flammable liquid and vapor
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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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

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