SAFETY DATA SHEET
DOW SILICONES CORPORATION

Product name: SILASTIC™ 5-8733 Fluorosilicone Sealant **Issue Date:** 03/08/2021
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DOW SILICONES CORPORATION encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product name: SILASTIC™ 5-8733 Fluorosilicone Sealant

Recommended use of the chemical and restrictions on use
Identified uses: Construction materials and additives Adhesive, binding agents

COMPANY IDENTIFICATION
DOW SILICONES CORPORATION
2200 WEST SALZBURG ROAD
MIDLAND MI 48686-0994
UNITED STATES

Customer Information Number: 800-258-2436
SDSQuestion@dow.com

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: 1 800 424 9300
Local Emergency Contact: 800-424-9300

2. HAZARDS IDENTIFICATION

Hazard classification
GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Serious eye damage - Category 1
Skin sensitisation - Category 1
Carcinogenicity - Category 1B
Reproductive toxicity - Category 2
Specific target organ toxicity - repeated exposure - Category 2 - Oral

Label elements
Hazard pictograms

Signal word: **DANGER!**

Hazards
May cause an allergic skin reaction.
Causes serious eye damage.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause damage to organs (Blood) through prolonged or repeated exposure if swallowed.

Precautionary statements

Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves, protective clothing, eye protection and/or face protection.

Response
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER and/or doctor.
IF exposed or concerned: Get medical advice/ attention.
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.
In case of fire: Avoid breathing fume.

Storage
Store locked up.

Disposal
Dispose of contents and/or container to an approved waste disposal plant.

Other hazards
No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Silicone elastomer
This product is a mixture.

Component	CASRN	Concentration

Vinyltri (methylethylketoxime) silane	2224-33-1	>= 5.0 - < 10.0 %
Tetra (methylethylketoxime) silane	34206-40-1	>= 1.0 - < 5.0 %
Methyl Ethyl Ketoxime	96-29-7	>= 0.1 - < 1.0 %
Trifluoropropylmethyl cyclotrisiloxane	2374-14-3	>= 0.1 - < 1.0 %
Hexane	110-54-3	>= 0.1 - < 1.0 %

Note
Actual concentration is withheld as a trade secret

4. FIRST AID MEASURES

Description of first aid measures
General advice:
First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air and keep comfortable for breathing; consult a physician.

Skin contact: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation or rash occurs. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

Eye contact: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

Ingestion: No emergency medical treatment necessary.

Most important symptoms and effects, both acute and delayed:
Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed
Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Water spray. Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media: None known..

Special hazards arising from the substance or mixture

Hazardous combustion products: Silicon oxides. Fluorine compounds. Formaldehyde. Carbon oxides. Nitrogen oxides (NOx).

Unusual Fire and Explosion Hazards: Exposure to combustion products may be a hazard to health.. Toxic vapours are evolved.. Fire burns more vigorously than would be expected..

Advice for firefighters

Fire Fighting Procedures: Use water spray to cool unopened containers.. Evacuate area.. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations..
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Remove undamaged containers from fire area if it is safe to do so.

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.. Use personal protective equipment.. Wear neoprene gloves to prevent contact with hydrofluoric acid..

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Remove all sources of ignition. Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions: Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Wipe up or scrape up and contain for salvage or disposal. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur.
See sections: 7, 8, 11, 12 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling: Do not get on skin or clothing. Do not swallow. Do not get in eyes. Keep container tightly closed. Protect from moisture. Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all (M)SDS and label warnings even after container is emptied.
Use with local exhaust ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Conditions for safe storage: Keep in properly labelled containers. Store locked up. Keep tightly closed. Store in accordance with the particular national regulations.

Do not store with the following product types: Strong oxidizing agents. Organic peroxides. Explosives. Gases.
Unsuitable materials for containers**:** Do not store in or use iron or steel containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value
Methyl Ethyl Ketoxime	Dow IHG	TWA	0.15 ppm
	Further information: Skin Sensitizer		
	US WEEL	TWA	10 ppm
	Further information: DSEN: Dermal Sensitization Notation		
Trifluoropropylmethyl cyclotrisiloxane	Dow IHG	TWA	5 Parts per billion
	Further information: SKIN: Absorbed via skin		
Hexane	ACGIH	TWA	50 ppm
	Further information: Skin: Danger of cutaneous absorption		
	OSHA Z-1	TWA	1,800 mg/m3 500 ppm
	OSHA P0	TWA	180 mg/m3 50 ppm

Although some of the components of this product may have exposure guidelines, no exposure would be expected under normal handling conditions due to the physical state of the material., The following substance(s), which have Occupational Exposure Limit(s) (OEL), may be formed during handling or processing:, Methyl ethyl ketoxime

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Hexane	110-54-3	2,5-Hexanedione	Urine	End of shift at end of workweek	0.5 mg/l	ACGIH BEI

Exposure controls
Engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure

limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection: Use chemical goggles.

Skin protection

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. Examples of acceptable glove barrier materials include: Natural rubber ("latex"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	paste
Color	grey
Odor	slight
Odor Threshold	No data available
pH	Not applicable
Melting point/range	No data available
Freezing point	No data available
Boiling point (760 mmHg)	Not applicable
Flash point	Not applicable
Evaporation Rate (Butyl Acetate = 1)	Not applicable
Flammability (solid, gas)	Not classified as a flammability hazard
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor Pressure	Not applicable
Relative Vapor Density (air = 1)	No data available

Relative Density (water = 1)	1.40
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Dynamic Viscosity	Not applicable
Kinematic Viscosity	No data available
Explosive properties	Not explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Molecular weight	No data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Can react with strong oxidizing agents. When heated to temperatures above 180 °C (356 °F) in the presence of air, trace quantities of formaldehyde may be released. Adequate ventilation is required.

Conditions to avoid: Do not expose to temperatures above 212 °F/100 °C. Exposure to moisture

Incompatible materials: Avoid contact with oxidizing materials.

Hazardous decomposition products:
Decomposition products can include and are not limited to: Benzene. Formaldehyde. Methyl Ethyl Ketoxime. Hydrofluoric acid. 3,3,3-Trifluoropropionaldehyde.

11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

Information on likely routes of exposure
Eye contact, Skin contact, Ingestion.

Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)

Acute oral toxicity
Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: Single dose oral LD50 has not been determined.

Based on information for component(s):

LD50, > 5,000 mg/kg Estimated.

Information for components:

Vinyltri (methylethylketoxime) silane
LD50, Rat, > 2,000 mg/kg

Tetra (methylethylketoxime) silane
Single dose oral LD50 has not been determined.

Methyl Ethyl Ketoxime
LD50, 100 mg/kg

Trifluoropropylmethyl cyclotrisiloxane
LD50, Rat, male and female, 4,650 mg/kg OECD 401 or equivalent

Hexane
May cause dizziness and drowsiness. May cause central nervous system effects. Signs and symptoms of excessive exposure may include: Gastrointestinal irritation. May cause nausea and vomiting. Lethal Dose, Humans, 2 Ounces Estimated.

LD50, Rat, > 16,000 mg/kg

Acute dermal toxicity
Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

Based on information for component(s):
LD50, > 2,000 mg/kg Estimated.

Information for components:

Vinyltri (methylethylketoxime) silane
LD50, Rat, > 2,000 mg/kg

Tetra (methylethylketoxime) silane
Based on data from similar materials LD50, Rat, male and female, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

Methyl Ethyl Ketoxime
LD50, Rabbit, male and female, 1,100 mg/kg OECD Test Guideline 402

Trifluoropropylmethyl cyclotrisiloxane
LD50, Rabbit, male and female, > 20,000 mg/kg OECD 402 or equivalent

Hexane
LD50, Rabbit, male and female, > 2,000 mg/kg No deaths occurred at this concentration.

Acute inhalation toxicity
Brief exposure (minutes) is not likely to cause adverse effects. Vapor from heated material may cause respiratory irritation.

As product: The LC50 has not been determined.

Information for components:

Vinyltri (methylethylketoxime) silane
The LC50 has not been determined.

Tetra (methylethylketoxime) silane
The LC50 has not been determined.

Methyl Ethyl Ketoxime
LC50, Rat, male and female, 4 Hour, dust/mist, > 4.83 mg/l OECD Test Guideline 403

Trifluoropropylmethyl cyclotrisiloxane
The LC50 has not been determined.

Hexane
LC50, Rat, male, 4 Hour, vapour, > 17.6 mg/l No deaths occurred at this concentration.

Skin corrosion/irritation
Brief contact is essentially nonirritating to skin.

Information for components:

Vinyltri (methylethylketoxime) silane
Brief contact may cause slight skin irritation with local redness.

Tetra (methylethylketoxime) silane
For similar material(s):
Brief contact may cause slight skin irritation with local redness.

Methyl Ethyl Ketoxime
Brief contact may cause skin irritation with local redness.
Prolonged contact may cause skin irritation with local redness.
May cause more severe response if skin is abraded (scratched or cut).

Trifluoropropylmethyl cyclotrisiloxane
Brief contact is essentially nonirritating to skin.

Hexane
May cause pain.
Prolonged contact may cause skin irritation with local redness.
Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage.
May cause drying and flaking of the skin.

Serious eye damage/eye irritation
May cause moderate eye irritation.
May cause corneal injury.

Information for components:

Vinyltri (methylethylketoxime) silane
May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Tetra (methylethylketoxime) silane
For similar material(s):
May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Methyl Ethyl Ketoxime
May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Trifluoropropylmethyl cyclotrisiloxane
May cause slight eye irritation.
Corneal injury is unlikely.

Hexane
May cause pain disproportionate to the level of irritation to eye tissues.
May cause slight temporary eye irritation.
Corneal injury is unlikely.
Vapor may cause eye irritation experienced as mild discomfort and redness.

Sensitization
For skin sensitization:
Contains component(s) which have caused allergic skin sensitization in guinea pigs.

For respiratory sensitization:
No relevant data found.

Information for components:

Vinyltri (methylethylketoxime) silane
Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

Tetra (methylethylketoxime) silane
For similar material(s):
Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

Methyl Ethyl Ketoxime
Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

Trifluoropropylmethyl cyclotrisiloxane
For skin sensitization:
Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

Hexane
Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:
No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Information for components:

Vinyltri (methylethylketoxime) silane
Available data are inadequate to determine single exposure specific target organ toxicity.

Tetra (methylethylketoxime) silane
Available data are inadequate to determine single exposure specific target organ toxicity.

Methyl Ethyl Ketoxime
May cause drowsiness or dizziness.
Route of Exposure: Inhalation
Target Organs: Central nervous system
Causes damage to organs.
Route of Exposure: Inhalation
Target Organs: Upper respiratory tract

Trifluoropropylmethyl cyclotrisiloxane
Available data are inadequate to determine single exposure specific target organ toxicity.

Hexane
May cause drowsiness or dizziness.
Route of Exposure: Inhalation
Target Organs: Central nervous system

Aspiration Hazard
Based on physical properties, not likely to be an aspiration hazard.

Information for components:

Vinyltri (methylethylketoxime) silane
Based on available information, aspiration hazard could not be determined.

Tetra (methylethylketoxime) silane
Based on available information, aspiration hazard could not be determined.

Methyl Ethyl Ketoxime
Based on available information, aspiration hazard could not be determined.

Trifluoropropylmethyl cyclotrisiloxane
Based on physical properties, not likely to be an aspiration hazard.

Hexane
Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)

Specific Target Organ Systemic Toxicity (Repeated Exposure)
Contains component(s) which have been reported to cause effects on the following organs in animals:
Blood.
Contains an additional component(s) that is not expected to be bioavailable due to the physical state of the material under normal handling and processing conditions.

Information for components:

Vinyltri (methylethylketoxime) silane
In animals, effects have been reported on the following organs:
Blood.

Tetra (methylethylketoxime) silane
In animals, effects have been reported on the following organs:
Blood

Methyl Ethyl Ketoxime
In animals, effects have been reported on the following organs:
Blood.
Eye.
Respiratory tract.
Observations in animals include:
May cause central nervous system depression.

Trifluoropropylmethyl cyclotrisiloxane
In animals, effects have been reported on the following organs:
Liver
Heart
Muscles.

Hexane
In humans, effects have been reported on the following organs:
Eye.
Peripheral nervous system.
In animals, effects have been reported on the following organs:
Nervous system.
Nasal tissue.

Carcinogenicity
Contains component(s) which have caused cancer in laboratory animals. During use of the material, small amounts of methylethylketoxime (MEKO) will be released. Rodents exposed to chronic MEKO inhalation throughout their lifetimes showed significant increases in liver tumour rates. Contains an additional component(s) that is not expected to be bioavailable due to the physical state of the material under normal handling and processing conditions.

Information for components:

Vinyltri (methylethylketoxime) silane
No relevant data found.

Tetra (methylethylketoxime) silane
No relevant data found.

Methyl Ethyl Ketoxime
Has caused cancer in laboratory animals.

Trifluoropropylmethyl cyclotrisiloxane
No relevant data found.

Hexane
Animal testing did not show any carcinogenic effects.

Teratogenicity
Contains component(s) which, in laboratory animals, have been toxic to the fetus only at doses toxic to the mother.

No relevant data found.

Information for components:

Vinyltri (methylethylketoxime) silane
No relevant data found.

Tetra (methylethylketoxime) silane
No relevant data found.

Methyl Ethyl Ketoxime
Did not cause birth defects or any other fetal effects in laboratory animals.

Trifluoropropylmethyl cyclotrisiloxane
Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

Hexane
Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

Reproductive toxicity
Contains component(s) which have interfered with fertility in animal studies. Contains component(s) which have been shown to interfere with reproduction in animal studies.

Information for components:

Vinyltri (methylethylketoxime) silane
No relevant data found.

Tetra (methylethylketoxime) silane
No relevant data found.

Methyl Ethyl Ketoxime
In animal studies, did not interfere with reproduction.

Trifluoropropylmethyl cyclotrisiloxane
In animal studies, has been shown to interfere with reproduction.

Hexane
In animal studies, has been shown to interfere with fertility in males.

Mutagenicity
Contains component(s) which were negative in some in vitro genetic toxicity studies and positive in others.

Information for components:

Vinyltri (methylethylketoxime) silane
In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Tetra (methylethylketoxime) silane
No relevant data found.

Methyl Ethyl Ketoxime
In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

Trifluoropropylmethyl cyclotrisiloxane
In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Hexane
In vitro studies showed both positive and negative effects Animal genetic toxicity studies were negative.

12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

Toxicity

Vinyltri (methylethylketoxime) silane

Acute toxicity to fish
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, > 120 mg/l, OECD Test Guideline 203
LC50, Oryzias latipes (Orange-red killifish), 96 Hour, > 100 mg/l, OECD Test Guideline 203

Tetra (methylethylketoxime) silane

Acute toxicity to fish
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
Based on data from similar materials
LC50, 96 Hour, > 100 mg/l

Acute toxicity to aquatic invertebrates
Based on data from similar materials

EC50, 48 Hour, > 100 mg/l

Methyl Ethyl Ketoxime

Acute toxicity to fish
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).
LC50, Lepomis macrochirus (Bluegill sunfish), static test, 96 Hour, 48 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates
EC50, Daphnia magna (Water flea), static test, 48 Hour, 201 mg/l, Method Not Specified.

Acute toxicity to algae/aquatic plants
EC50, Scenedesmus capricornutum (fresh water algae), static test, 72 Hour, Growth rate, 11.8 mg/l, OECD Test Guideline 201 or Equivalent
NOEC, Scenedesmus capricornutum (fresh water algae), 72 Hour, 2.56 mg/l, OECD Test Guideline 201 or Equivalent

Toxicity to bacteria
EC50, Bacteria, 17 Hour, 281 mg/l

Chronic toxicity to fish
NOEC, Oryzias latipes (Orange-red killifish), 14 d, survival, 50 mg/l

Chronic toxicity to aquatic invertebrates
NOEC, Daphnia magna (Water flea), 21 d, number of offspring, > 100 mg/l

Trifluoropropylmethyl cyclotrisiloxane

Acute toxicity to fish
Toxicity to aquatic species occurs at concentrations above material's water solubility.

Hexane

Acute toxicity to fish
Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).
LC50, Fish, 96 Hour, 12.51 mg/l, Estimated by Structure-Activity Relationship (SAR).

Acute toxicity to aquatic invertebrates
EL50, Daphnia magna (Water flea), 48 Hour, 21.85 mg/l, Estimated by Structure-Activity Relationship (SAR).

Acute toxicity to algae/aquatic plants
EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate, 9.285 mg/l, Estimated by Structure-Activity Relationship (SAR).
NOEC, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate, 2.077 mg/l, Estimated by Structure-Activity Relationship (SAR).

Chronic toxicity to fish
NOEC, Oncorhynchus mykiss (rainbow trout), 28 d, growth, 2.8 mg/l

Chronic toxicity to aquatic invertebrates
NOEC, Daphnia magna, 21 d, number of offspring, 4.88 mg/l

Persistence and degradability

Vinyltri (methylethylketoxime) silane

Biodegradability: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.
10-day Window: Fail
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301A

Stability in Water (1/2-life)
Hydrolysis, DT50, < 1 min, Half-life Temperature 2 °C, OECD Test Guideline 111

Tetra (methylethylketoxime) silane

Biodegradability: No relevant data found.

Methyl Ethyl Ketoxime

Biodegradability: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. Material has inherent, primary biodegradability according to OECD test (s) guidelines (reaches > 20% biodegradation in OECD test(s).
10-day Window: Not applicable
Biodegradation: 70 %
Exposure time: 14 d
Method: OECD Test Guideline 302B or Equivalent

Theoretical Oxygen Demand: 2.57 mg/mg

Photodegradation
Test Type: Half-life (indirect photolysis)
Sensitization: OH radicals
Atmospheric half-life: 7.211 d
Method: Estimated.

Trifluoropropylmethyl cyclotrisiloxane

Biodegradability: Material is not readily biodegradable according to OECD/EEC guidelines.
10-day Window: Fail
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent

Hexane

Biodegradability: Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%). Biodegradation rate may increase in soil and/or water with acclimation.
Based on information for a similar material: 10-day Window: Pass
Biodegradation: 98 %
Exposure time: 28 d
Method: OECD Test Guideline 301F or Equivalent

Theoretical Oxygen Demand: 3.54 mg/mg

Biological oxygen demand (BOD)

Incubation Time	BOD
5 d	22 %
10 d	52 %
20 d	81 %

Photodegradation
Test Type: Half-life (indirect photolysis)
Sensitization: OH radicals
Atmospheric half-life: 1.960 d
Method: Estimated.

Bioaccumulative potential

Vinyltri (methylethylketoxime) silane
Bioaccumulation: No relevant data found.

Tetra (methylethylketoxime) silane
Bioaccumulation: No relevant data found.

Methyl Ethyl Ketoxime
Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water(log Pow): 0.63 Measured
Bioconcentration factor (BCF): <= 5.8 Cyprinus carpio (Carp) 42 d Measured

Trifluoropropylmethyl cyclotrisiloxane
Bioaccumulation: Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).
Partition coefficient: n-octanol/water(log Pow): 9 Estimated by Structure-Activity Relationship (SAR).

Hexane
Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).
Partition coefficient: n-octanol/water(log Pow): 3.868 Estimated.
Bioconcentration factor (BCF): 501 Pimephales promelas (fathead minnow) Calculated.

Mobility in soil

Vinyltri (methylethylketoxime) silane
No relevant data found.

Tetra (methylethylketoxime) silane
No relevant data found.

Methyl Ethyl Ketoxime
Partition coefficient (Koc): 130 Estimated.

Trifluoropropylmethyl cyclotrisiloxane
No relevant data found.

Hexane
Partition coefficient (Koc): 3.67 Estimated.

13. DISPOSAL CONSIDERATIONS

Disposal methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section10 Regulatory Information, MSDS Section 15

Treatment and disposal methods of used packaging: Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Do not re-use containers for any purpose.

14. TRANSPORT INFORMATION

DOT

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

Not regulated for transport

Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Respiratory or skin sensitisation
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Serious eye damage or eye irritation

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Pennsylvania Right To Know
The following chemicals are listed because of the additional requirements of Pennsylvania law:

Components	CASRN
Trifluoropropylmethyl siloxane, hydroxy-terminated	68607-77-2
Hexamethyldisilazane reaction with Silica	68909-20-6
Vinyltri (methylethylketoxime) silane	2224-33-1
Titanium dioxide	13463-67-7
Silicon dioxide	7631-86-9

California Prop. 65
WARNING: This product can expose you to chemicals including Hexane, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

United States TSCA Inventory (TSCA)
All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION

Hazard Rating System
NFPA

Health	Flammability	Instability
3	1	0

HMIS

Health	Flammability	Physical Hazard
3*	1	0

* = Chronic Effects (See Hazards Identification)

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Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	ACGIH - Biological Exposure Indices (BEI)

Dow IHG	Dow Industrial Hygiene Guideline
OSHA P0	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
TWA	Time weighted average
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

Full text of other abbreviations
AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Information Source and References
This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

DOW SILICONES CORPORATION urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the

safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.
US