

# **SAFETY DATA SHEET**

# **DOW SILICONES CORPORATION**

Product name: DOWSIL™ 3-6077 RTV Silicone Ablative Base Issue Date: 08/24/2021 Print Date: 08/25/2021

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: DOWSIL™ 3-6077 RTV Silicone Ablative Base

Recommended use of the chemical and restrictions on use

**Identified uses:** Ablatives

**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)

Reproductive toxicity - Category 2

Label elements Hazard pictograms



Signal word: WARNING!

#### **Hazards**

Suspected of damaging fertility or the unborn child.

# **Precautionary statements**

#### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

# Response

IF exposed or concerned: Get medical advice/ attention.

# 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
Zircon	14940-68-2	>= 20.0 - <= 30.0 %
Diatomaceous earth, Flux-calcined	68855-54-9	>= 10.0 - <= 20.0 %
Cristobalite	14464-46-1	>= 10.0 - <= 20.0 %
Amorphous silica	7631-86-9	>= 1.0 - <= 2.0 %
Quartz	14808-60-7	>= 1.0 - <= 2.0 %
Octamethyl Cyclotetrasiloxane	556-67-2	<= 0.2 %

# 4. FIRST AID MEASURES

# Description of first aid measures

#### General advice:

No special precautions are necessary for first aid responders.

Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms occur.

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Skin contact: Wash with water and soap as a precaution. Get medical attention if symptoms occur.

**Eye contact:** Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.

**Ingestion:** If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed:

Suspected of damaging fertility or the unborn child.

Indication of any immediate medical attention and special treatment needed

# 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: Metal oxides. Carbon oxides. Silicon oxides.

**Unusual Fire and Explosion Hazards:** Exposure to combustion products may be a hazard to health...

#### 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..

# 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** 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.

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**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.

See sections: 7, 8, 11, 12 and 13.

# 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with eyes. Do not swallow. Avoid prolonged or repeated contact with skin. 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 only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

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

Do not store with the following product types: Strong oxidizing agents.

Unsuitable materials for containers: None known.

# 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
Zircon	OSHA Z-1	TWA	5 mg/m3 , Zirconium
	ACGIH	TWA	5 mg/m3 , Zirconium
	Further information: A4: No	t classifiable as a human car	cinogen
	ACGIH	STEL	10 mg/m3 , Zirconium
	Further information: A4: No	t classifiable as a human car	cinogen
Octamethyl	US WEEL	TWA	10 ppm
Cyclotetrasiloxane			
Propyl alcohol	ACGIH	TWA	100 ppm
	Further information: A4: No	t classifiable as a human care	cinogen
	OSHA Z-1	TWA	500 mg/m3 200 ppm

The following substance(s), which have Occupational Exposure Limit(s) (OEL), may be formed during handling or processing:

Propyl alcohol

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.

# **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.

**Hygiene measures:** Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

# Individual protection measures

**Eye/face protection:** Use safety glasses (with side shields). **Skin protection** 

Hand protection: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). 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:** When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as faceshield, 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.

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

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

Physical state paste
Color white
Odor none

Odor Threshold

PH

Not applicable

Melting point/range

No data available

No data available

No data available

No data available

Not applicable

Not applicable

Flash point

Not applicable

Not applicable

Not applicable

Not applicable

= 1)

Flammability (solid, gas) Not classified as a flammability hazard

Lower explosion limitNo data availableUpper explosion limitNo data available

Vapor Pressure Not applicable

Relative Vapor Density (air = 1) No data available

Relative Density (water = 1) 1.5 1.5

Water solubility

No data available

Partition coefficient: n
No data available

octanol/water

Auto-ignition temperature No data available Decomposition temperature 500 °C (932 °F)

Kinematic Viscosity 1500000 cSt at 25 °C (77 °F)

Explosive properties Not explosive

Oxidizing properties The substance or mixture is not classified as oxidizing.

Molecular weightNo data availableParticle sizeNo 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: None known.

**Incompatible materials:** Avoid contact with oxidizing materials.

### **Hazardous decomposition products**

Thermal decomposition:

Decomposition products can include and are not limited to: Benzene. Formaldehyde. Propyl alcohol.

# 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

Product test data not available.

# Information for components:

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#### **Zircon**

Single dose oral LD50 has not been determined.

#### Diatomaceous earth, Flux-calcined

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

## Cristobalite

Single dose oral LD50 has not been determined.

# Amorphous silica

LD50, Rat, > 5,000 mg/kg

#### Quartz

Single dose oral LD50 has not been determined.

# Octamethyl Cyclotetrasiloxane

LD50, Rat, male, > 4,800 mg/kg No deaths occurred at this concentration.

# **Acute dermal toxicity**

Product test data not available.

#### Information for components:

#### Zircon

The dermal LD50 has not been determined.

#### Diatomaceous earth, Flux-calcined

The dermal LD50 has not been determined.

For similar material(s): LD50, Rabbit, > 5,000 mg/kg

### **Cristobalite**

The dermal LD50 has not been determined.

#### **Amorphous silica**

LD50, Rabbit, > 2,000 mg/kg Estimated.

#### Quartz

The dermal LD50 has not been determined.

# **Octamethyl Cyclotetrasiloxane**

LD50, Rat, male and female, > 2,400 mg/kg No deaths occurred at this concentration.

# Acute inhalation toxicity

Product test data not available.

# Information for components:

#### Zircon

The LC50 has not been determined.

# Diatomaceous earth, Flux-calcined

No adverse effects are anticipated from single exposure to dust. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

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LC50, Rat, male and female, 4 Hour, dust/mist, > 2.6 mg/l The LC50 value is greater than the Maximum Attainable Concentration. No deaths occurred at this concentration.

#### Cristobalite

Vapors are unlikely due to physical properties. Dust may cause irritation of the upper respiratory tract (nose and throat) and lungs. Excessive exposure may cause lung injury.

The LC50 has not been determined.

#### Amorphous silica

Maximum attainable concentration. LC50, Rat, 4 Hour, dust/mist, > 2.08 mg/l OECD Test Guideline 403 No deaths occurred at this concentration.

#### Quartz

The LC50 has not been determined.

# Octamethyl Cyclotetrasiloxane

LC50, Rat, male and female, 4 Hour, dust/mist, 36 mg/l OECD Test Guideline 403

#### Skin corrosion/irritation

Product test data not available.

#### Information for components:

#### Zircon

Brief contact may cause skin irritation with local redness.

#### Diatomaceous earth, Flux-calcined

Brief contact is essentially nonirritating to skin.

Prolonged contact may cause slight skin irritation with local redness.

# Cristobalite

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the skin.

### Amorphous silica

Brief contact is essentially nonirritating to skin.

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the skin.

# **Quartz**

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the skin.

# Octamethyl Cyclotetrasiloxane

Brief contact is essentially nonirritating to skin.

# Serious eye damage/eye irritation

Product test data not available.

# Information for components:

### <u>Zircon</u>

May cause eye irritation.

### Diatomaceous earth, Flux-calcined

May cause slight eye irritation.

Corneal injury is unlikely.

#### Cristobalite

Solid or dust may cause irritation or corneal injury due to mechanical action.

# Amorphous silica

Solid or dust may cause irritation or corneal injury due to mechanical action.

#### Quartz

Solid or dust may cause irritation or corneal injury due to mechanical action.

# **Octamethyl Cyclotetrasiloxane**

Essentially nonirritating to eyes.

#### Sensitization

Product test data not available.

#### Information for components:

#### Zircon

For skin sensitization:

No data available

For respiratory sensitization:

No data available

# Diatomaceous earth, Flux-calcined

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

# Cristobalite

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

# **Amorphous silica**

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

#### Quartz

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

#### **Octamethyl Cyclotetrasiloxane**

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

# **Specific Target Organ Systemic Toxicity (Single Exposure)**

Product test data not available.

### Information for components:

#### **Zircon**

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

### Diatomaceous earth, Flux-calcined

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Cristobalite**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

# **Amorphous silica**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

# Quartz

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

# Octamethyl Cyclotetrasiloxane

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Aspiration Hazard**

Product test data not available.

#### Information for components:

# **Zircon**

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

# Diatomaceous earth, Flux-calcined

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

#### Cristobalite

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

#### **Amorphous silica**

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

# Quartz

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

### **Octamethyl Cyclotetrasiloxane**

May be harmful if swallowed and enters airways.

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)**

Product test data not available.

### Information for components:

#### Zircon

No relevant data found.

#### Diatomaceous earth, Flux-calcined

Repeated excessive inhalation exposures to dusts may cause respiratory effects.

Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

#### Cristobalite

Repeated excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs.

For similar material(s):

In humans, effects have been reported on the following organs:

Kidney.

Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

# **Amorphous silica**

Diatomaceous earth or amorphous silica is considered a nuisance dust and does not cause the lung injury associated with crystalline silica. However, repeated excessive exposures to dust of amorphous silica (which is the main component in this product) may cause potentially reversible lung effects.

Repeated exposures to dusts of this material are not anticipated to result in systemic toxicity or permanent lung injury; however, excessive exposures may cause less severe respiratory effects.

Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

## Quartz

In humans, effects have been reported on the following organs:

Kidney.

Repeated excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs.

Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

#### **Octamethyl Cyclotetrasiloxane**

In animals, effects have been reported on the following organs:

Kidney.

Liver.

Respiratory tract.

Female reproductive organs.

# Carcinogenicity

Product test data not available.

# Information for components:

#### Zircon

No data available.

### Diatomaceous earth, Flux-calcined

Available data are inadequate to evaluate carcinogenicity.

#### Cristobalite

Has caused cancer in humans. Has caused cancer in laboratory animals. Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

#### **Amorphous silica**

Animal testing and human experience demonstrate no significant risk of human cancer from exposure to relatively pure amorphous silica.

#### Quartz

Has caused cancer in humans. Has caused cancer in laboratory animals. Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

#### Octamethyl Cyclotetrasiloxane

Results from a 2 year repeated vapour inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. This finding occurred at the highest exposure dose (700 ppm) only. Studies to date have not demonstrated if these effects occur through pathways that are relevant to humans. Repeated exposure in rats to D4 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

# **Teratogenicity**

Product test data not available.

#### Information for components:

# <u>Zircon</u>

No data available.

# Diatomaceous earth, Flux-calcined

No relevant data found.

# **Cristobalite**

For similar material(s): Did not cause birth defects or any other fetal effects in laboratory animals.

#### Amorphous silica

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

#### Quartz

For similar material(s): Did not cause birth defects or any other fetal effects in laboratory animals.

#### **Octamethyl Cyclotetrasiloxane**

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

#### Reproductive toxicity

Product test data not available.

### Information for components:

#### Zircon

No data available.

# Diatomaceous earth, Flux-calcined

No relevant data found.

#### Cristobalite

No relevant data found.

# **Amorphous silica**

No relevant data found.

#### Quartz

No relevant data found.

#### Octamethyl Cyclotetrasiloxane

In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. In animal studies, has been shown to interfere with fertility.

#### Mutagenicity

Product test data not available.

#### Information for components:

#### <u>Zircon</u>

No data available

### Diatomaceous earth, Flux-calcined

In vitro genetic toxicity studies were negative.

#### Cristobalite

For similar material(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases.

# **Amorphous silica**

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

#### Quartz

In vitro genetic toxicity studies were negative in some cases and positive in other cases.

# **Octamethyl Cyclotetrasiloxane**

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

#### 12. ECOLOGICAL INFORMATION

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

# **Toxicity**

### **Zircon**

# Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

# Acute toxicity to aquatic invertebrates

Based on data from similar materials

EC50, Daphnia magna (Water flea), 48 Hour, > 100 mg/l

### Acute toxicity to algae/aquatic plants

Based on data from similar materials

NOEC, Chlorella vulgaris (Fresh water algae), 15 d, > 200 mg/l

# Diatomaceous earth, Flux-calcined

# Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

No toxicity at the limit of solubility

# Acute toxicity to aquatic invertebrates

EL50, Daphnia magna (Water flea), 48 Hour, > 100 mg/l, OECD Test Guideline 202

#### Acute toxicity to algae/aquatic plants

EL50, Desmodesmus subspicatus (green algae), 72 Hour, > 100 mg/l, OECD Test Guideline 201

NOELR, Desmodesmus subspicatus (green algae), 72 Hour, > 100 mg/l, OECD Test Guideline 201

# Toxicity to bacteria

EC50, 3 Hour, > 1,000 mg/l, OECD Test Guideline 209

# **Cristobalite**

# Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

# Acute toxicity to aquatic invertebrates

Based on data from similar materials

EC50, Daphnia magna (Water flea), 48 Hour, > 100 mg/l

# **Amorphous silica**

# 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, Danio rerio (zebra fish), 96 Hour, 5,000 - 10,000 mg/l

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 24 Hour, > 1,000 mg/l

### Acute toxicity to algae/aquatic plants

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Biomass, 440 mg/l

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#### Quartz

### Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

### Octamethyl Cyclotetrasiloxane

#### Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

No toxicity at the limit of solubility

LC50, Oncorhynchus mykiss (rainbow trout), flow-through, 96 Hour, > 0.022 mg/l

No toxicity at the limit of solubility

LC50, Cyprinodon variegatus (sheepshead minnow), flow-through, 14 d, > 0.0063 mg/l

# Acute toxicity to aquatic invertebrates

No toxicity at the limit of solubility

EC50, Mysidopsis bahia (opossum shrimp), flow-through test, 96 Hour, > 0.0091 mg/l

No toxicity at the limit of solubility

EC50, Daphnia magna (Water flea), flow-through test, 48 Hour, > 0.015 mg/l

### Acute toxicity to algae/aquatic plants

No toxicity at the limit of solubility

ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate, > 0.022 mg/l

#### Chronic toxicity to fish

No toxicity at the limit of solubility

NOEC, Oncorhynchus mykiss (rainbow trout), 93 d, >= 0.0044 mg/l

# Chronic toxicity to aquatic invertebrates

No toxicity at the limit of solubility

NOEC, Daphnia magna (Water flea), 21 d, >= 0.0079 mg/l

#### Persistence and degradability

#### <u>Zircon</u>

**Biodegradability:** Biodegradation is not applicable.

### Diatomaceous earth, Flux-calcined

Biodegradability: No relevant data found.

#### Cristobalite

**Biodegradability:** Biodegradation is not applicable.

#### Amorphous silica

Biodegradability: Biodegradation is not applicable.

#### Quartz

Biodegradability: Biodegradation is not applicable.

### **Octamethyl Cyclotetrasiloxane**

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Biodegradability: Material is expected to biodegrade very slowly (in the environment). Fails

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to pass OECD/EEC tests for ready biodegradability.

10-day Window: Not applicable **Biodegradation:** 3.7 %

**Exposure time:** 28 d

Method: OECD Test Guideline 310

### Stability in Water (1/2-life)

Hydrolysis, DT50, 69.3 - 144 Hour, pH 7, Half-life Temperature 24.6 °C, OECD Test Guideline

# **Photodegradation**

Atmospheric half-life: 16 d

Method: Estimated.

# Bioaccumulative potential

### **Zircon**

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

### Cristobalite

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

#### Amorphous silica

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 0.53

**Bioconcentration factor (BCF): 3.16** 

#### Quartz

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

# Octamethyl Cyclotetrasiloxane

**Bioaccumulation:** Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and

Partition coefficient: n-octanol/water(log Pow): 6.49 Measured

Bioconcentration factor (BCF): 12,400 Pimephales promelas (fathead minnow) Measured

# Mobility in soil

#### **Zircon**

No relevant data found.

#### Cristobalite

No relevant data found.

# Amorphous silica

Partition coefficient (Koc): 21.73

### Quartz

No relevant data found.

## **Octamethyl Cyclotetrasiloxane**

Partition coefficient (Koc): 16596 OECD Test Guideline 106

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# 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: Recycler. Reclaimer. Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section 10 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 Consult IMO regulations before transporting ocean bulk

Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code

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

Reproductive toxicity

# 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
Polydimethylsiloxane hydroxy-terminated	70131-67-8
Zircon	14940-68-2
Diatomaceous earth, Flux-calcined	68855-54-9
Cristobalite	14464-46-1
Quartz	14808-60-7

### California Prop. 65

WARNING: This product can expose you to chemicals including Toluene, 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	Fiammability	instability
	0	1	0
H	MIS		
	Health	Flammability	Physical Hazard

<sup>\* =</sup> Chronic Effects (See Hazards Identification)

#### Revision

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#### Legend

ACGIH USA. ACGIH Threshold Limit Values (TLV)		ACGIH	USA. ACGIH Threshold Limit Values (TLV)
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OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air
	Contaminants
STEL	Short-term exposure limit
TWA	8-hour, 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: TECI - Thailand Existing Chemicals 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.

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