



# SAFETY DATA SHEET

- 1. DOWSIL™ 580 (AUS) Glass, Metal and Masonry Sealant White**
- 2. DOWSIL™ 580 (AUS) Glass, Metal and Masonry Sealant Translucent**
- 3. DOWSIL™ 580 (AUS) Glass, Metal and Masonry Sealant Black**



# SAFETY DATA SHEET

DOW CHEMICAL (AUSTRALIA) PTY LTD

**Product name: DOWSIL™ 580 (AUS) Glass, Metal and Masonry Sealant White**

**Issue Date: 19.12.2022**

**Print Date: 20.12.2022**

DOW CHEMICAL (AUSTRALIA) PTY LTD 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.

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## SECTION 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

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**Product name:** DOWSIL™ 580 (AUS) Glass, Metal and Masonry Sealant White

**Recommended use of the chemical and restrictions on use**

**Identified uses:** Adhesive, binding agents

**COMPANY IDENTIFICATION**

DOW CHEMICAL (AUSTRALIA) PTY LTD  
LEVEL 29  
367 COLLINS STREET  
MELBOURNE VIC 3000  
AUSTRALIA

**Customer Information Number:**

1800-780-074  
SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER**

**24-Hour Emergency Contact:** 1800-033-882

**Local Emergency Contact:** 1800-033-882

**For advice, contact a doctor (at once) or the Australian Poisons Information Centre: 131 126**

**Transport Emergency Only Dial 000**

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## SECTION 2: HAZARD(S) IDENTIFICATION

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**GHS Classification**

Serious eye damage/eye irritation - Category 2A

Skin sensitisation - Category 1

**GHS label elements**

**Hazard pictograms**



Signal word: **WARNING!**

**Hazard statements**

May cause an allergic skin reaction.  
Causes serious eye irritation.

**Precautionary statements**

**Prevention**

Avoid breathing dust.  
Wash skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves/ eye protection/ face protection.

**Response**

IF ON SKIN: Wash with plenty of water.  
If skin irritation or rash occurs: Get medical advice/ attention.  
If eye irritation persists: Get medical advice/ attention.  
Take off contaminated clothing and wash it before reuse.

**Disposal**

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

**Other hazards**

No data available

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**SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS, IN ACCORDANCE WITH SCHEDULE 8**

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This product is a mixture.

<b>Component</b>	<b>CASRN</b>	<b>Concentration</b>
Calcium carbonate treated with stearic acid	Not available	>= 36.0 - <= 47.0 %
Distillates (petroleum), hydrotreated middle	64742-46-7	>= 2.0 - <= 7.0 %
Silicon dioxide	7631-86-9	>= 3.0 - <= 6.0 %
2-Butanone, O,O',O''-(methylsilylidyne)trioxime	22984-54-9	>= 2.0 - <= 5.0 %
Titanium dioxide	13463-67-7	>= 0.2 - <= 1.3 %

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N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine	1760-24-3	>= 0.5 - <= 1.2 %
Vinyltri (methylethylketoxime) silane	2224-33-1	>= 0.14 - <= 0.7 %
Methyltri(ethylmethylketoxime)silane isomers and oligomers	Not available	>= 0.28 - <= 0.5 %
Quartz	14808-60-7	>= 0.29 - <= 0.48 %
Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)siloxane	68928-76-7	>= 0.04 - <= 0.15 %

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## **SECTION 4: FIRST AID MEASURES**

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### **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. Suitable emergency safety shower facility should be available in work area.

**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:** If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

#### **Most important symptoms and effects, both acute and delayed:**

May cause an allergic skin reaction. Causes serious eye irritation.

#### **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. Skin contact may aggravate preexisting dermatitis.

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## SECTION 5: FIREFIGHTING MEASURES

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### Hazchem Code

None Allocated

### Extinguishing media

**Suitable extinguishing media:** Alcohol-resistant foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray.

**Unsuitable extinguishing media:** None known..

### Special hazards arising from the substance or mixture

**Hazardous combustion products:** Metal oxides. Formaldehyde. Carbon oxides. Silicon oxides. Nitrogen oxides (NO<sub>x</sub>).

**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..

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**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.

## SECTION 7: HANDLING AND STORAGE, INCLUDING HOW THE CHEMICAL MAY BE SAFELY USED

**Precautions for safe handling:** Do not get on skin or clothing. Do not swallow. Do not get in eyes. 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 only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

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

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

## SECTION 8: EXPOSURE CONTROLS AND 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
Calcium carbonate treated with stearic acid	Dow IHG	TWA	1 mg/m3
	AU OEL	TWA	10 mg/m3 , Calcium carbonate
Distillates (petroleum), hydrotreated middle	AU OEL	TWA Mist	5 mg/m3
Silicon dioxide	Dow IHG	TWA Respirable dust	2 mg/m3
	Dow IHG	TWA Total dust	6 mg/m3
	AU OEL	TWA Respirable dust	2 mg/m3
Titanium dioxide	Dow IHG	TWA	2.4 mg/m3
	ACGIH	TWA	2.5 mg/m3
	Further information: A3: Confirmed animal carcinogen with unknown relevance to humans		
	AU OEL	TWA	10 mg/m3
	Further information: a: This value is for inhalable dust containing no asbestos and < 1% crystalline silica		
N-(3-(Trimethoxysilyl)propyl)-1,2-ethanediamine	Dow IHG		See Further information
	Further information: Skin Sensitizer		
Quartz	ACGIH	TWA Respirable particulate matter	0.025 mg/m3 , Silica
	Further information: lung cancer: Lung cancer; pulm fibrosis: Pulmonary fibrosis; A2: Suspected human carcinogen		
	AU OEL	TWA Respirable dust	0.1 mg/m3
Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane	ACGIH	TWA	0.1 mg/m3 , Tin

	Further information: A4: Not classifiable as a human carcinogen; Skin: Danger of cutaneous absorption		
	ACGIH	STEL	0.2 mg/m3 , Tin
	Further information: A4: Not classifiable as a human carcinogen; Skin: Danger of cutaneous absorption		
	AU OEL	TWA	0.1 mg/m3 , Tin
	Further information: Sk: Skin absorption		
	AU OEL	STEL	0.2 mg/m3 , Tin
	Further information: Sk: Skin absorption		
Methanol	ACGIH	TWA	200 ppm
	Further information: Skin: Danger of cutaneous absorption		
	ACGIH	STEL	250 ppm
	Further information: Skin: Danger of cutaneous absorption		
	AU OEL	TWA	262 mg/m3 200 ppm
	Further information: Sk: Skin absorption		
	AU OEL	STEL	328 mg/m3 250 ppm
	Further information: Sk: Skin absorption		
Methyl Ethyl Ketoxime	US WEEL	TWA	10 ppm
	Further information: DSEN: Dermal Sensitization Notation		
	Dow IHG	TWA	0.15 ppm
	Further information: Skin Sensitizer		

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

Methanol.

Methyl ethyl ketoxime

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.

**Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 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 chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. 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"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to AS/NZS 2161.10) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to AS/NZS 2161.10) is recommended. 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, use an approved respirator. When respiratory protection is required, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply.

**Other Information:** Selection and use of personal protective equipment should be in accordance with the recommendations in one or more of the relevant Australian/New Zealand Standards, including:  
AS/NZS 1336: Eye and face protection – Guidelines.  
AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications.  
AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment.  
AS/NZS 2161: Occupational protective gloves.  
AS/NZS 2210: Occupational protective footwear.  
AS/NZS 4501: Occupational protective clothing Set

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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Physical state	paste
Color	white
Odor	slight
Odor Threshold	No data available
pH	Not applicable
Melting point/freezing point	
Melting point/range	No data available
Freezing point	No data available
Boiling point, initial boiling point and boiling range	
Boiling point (760 mmHg)	Not applicable
Flash point	Not applicable
Evaporation Rate (Butyl Acetate = 1)	Not applicable
Flammability	



<b>Flammability (solid, gas)</b>	Not classified as a flammability hazard
<b>Flammability (liquids)</b>	No data available
<b>Lower explosion limit and upper explosion limit / flammability limit</b>	
<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Vapor Pressure</b>	Not applicable
<b>Relative vapour density</b>	
<b>Relative Vapor Density (air = 1)</b>	No data available
<b>Density and / or relative density</b>	
<b>Relative Density (water = 1)</b>	1.38
<b>Solubility(ies)</b>	
<b>Water solubility</b>	No data available
<b>Partition coefficient: n-octanol/water (log value)</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Dynamic Viscosity</b>	Not applicable
<b>Kinematic Viscosity</b>	Not applicable
<b>Explosive properties</b>	Not explosive
<b>Oxidizing properties</b>	The substance or mixture is not classified as oxidizing.
<b>Molecular weight</b>	No data available
<b>Particle characteristics</b>	
<b>Particle size</b>	No data available

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

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## SECTION 10: STABILITY AND REACTIVITY

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**Reactivity:** Not classified as a reactivity hazard.

**Chemical stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** Can react with strong oxidizing agents.

**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: Formaldehyde. Methyl Ethyl Ketoxime. Methanol.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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*Toxicological information appears in this section when such data are available.*

### Exposure routes

Eye contact, Skin contact, Ingestion.

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

#### Acute Toxicity Endpoints:

Not classified based on available information.

#### Acute oral toxicity

##### Information for the Product:

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause abdominal discomfort or diarrhea.

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

Based on information for component(s):  
LD50, Rat, > 5,000 mg/kg Estimated.

##### Information for components:

#### Calcium carbonate treated with stearic acid

Single dose oral LD50 has not been determined.

For similar material(s): LD50, Rat, > 2,000 mg/kg No deaths occurred at this concentration.

#### Distillates (petroleum), hydrotreated middle

LD50, Rat, > 5,000 mg/kg

#### Silicon dioxide

LD50, Rat, > 5,000 mg/kg

#### 2-Butanone, O,O',O''-(methylsilyldyne)trioxime

LD50, Rat, male and female, 2,463 mg/kg OECD Test Guideline 401

#### Titanium dioxide

LD50, Rat, > 10,000 mg/kg

#### N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine

LD50, Rat, male and female, 2,295 mg/kg OPPTS 870.1100

This substance may hydrolyze to release Methanol. Methanol is highly toxic to humans and may cause central nervous system effects, visual disturbances up to blindness, metabolic acidosis, and degenerative damage to other organs including liver, kidney, and heart.

**Vinyltri (methylethylketoxime) silane**

LD50, Rat, > 2,000 mg/kg

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): LD50, Rat, male and female, 2,463 mg/kg OECD Test  
Guideline 401

**Quartz**

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

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

LD50, Rat, male and female, 892 mg/kg OECD 401 or equivalent

**Acute dermal toxicity**

**Information for the Product:**

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:**

**Calcium carbonate treated with stearic acid**

The dermal LD50 has not been determined.

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

**Distillates (petroleum), hydrotreated middle**

LD50, Rabbit, > 3,160 mg/kg No deaths occurred at this concentration.

**Silicon dioxide**

LD50, Rabbit, > 5,000 mg/kg

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

LD50, Rat, male and female, > 2,000 mg/kg OECD Test Guideline 402 No deaths  
occurred at this concentration.

**Titanium dioxide**

LD50, Rabbit, 10,000 mg/kg

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

This substance may hydrolyze to release Methanol. Effects of methanol are the same as observed via oral and inhalation exposure and include central nervous system (CNS) depression, visual impairment up to blindness, metabolic acidosis, with effects on organ systems such as liver, kidneys and heart, even death.

**Vinyltri (methylethylketoxime) silane**

LD50, Rat, > 2,000 mg/kg

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): LD50, Rat, male and female, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

**Quartz**

The dermal LD50 has not been determined.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

LD50, Rat, > 2,000 mg/kg

**Acute inhalation toxicity**

**Information for the Product:**

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:**

**Calcium carbonate treated with stearic acid**

The LC50 has not been determined.

**Distillates (petroleum), hydrotreated middle**

LC50, Rat, 4 Hour, dust/mist, > 5.2 mg/l No deaths occurred at this concentration.

**Silicon dioxide**

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

**2-Butanone, O,O',O''-(methylsilyldyne)trioxime**

The LC50 has not been determined.

**Titanium dioxide**

LC50, Rat, male, 4 Hour, dust/mist, > 6.82 mg/l No deaths occurred at this concentration.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

LC50, Rat, 4 Hour, dust/mist, 1.49 - 2.44 mg/l OECD Test Guideline 403

This substance may hydrolyze to release Methanol. Inhalation of methanol may cause effects ranging from headache, narcosis and visual impairment to metabolic acidosis, blindness, and even death.

**Vinyltri (methylethylketoxime) silane**

The LC50 has not been determined.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

The LC50 has not been determined.

**Quartz**

The LC50 has not been determined.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

As product: The LC50 has not been determined.

**Skin corrosion/irritation**

Not classified based on available information.

**Information for the Product:**

Based on information for component(s):

Brief contact may cause slight skin irritation with local redness.

May cause drying and flaking of the skin.

**Information for components:**

**Calcium carbonate treated with stearic acid**

Essentially nonirritating to skin.

May cause drying and flaking of the skin.

**Distillates (petroleum), hydrotreated middle**

Brief contact may cause slight skin irritation with local redness.

**Silicon dioxide**

Brief contact is essentially nonirritating to skin.

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the skin.

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

Brief contact may cause slight skin irritation with local redness.

**Titanium dioxide**

Essentially nonirritating to skin.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

Brief contact may cause moderate skin irritation with local redness.

**Vinyltri (methylethylketoxime) silane**

Brief contact may cause slight skin irritation with local redness.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s):

Brief contact may cause slight skin irritation with local redness.

**Quartz**

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the skin.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

Brief contact may cause skin irritation with local redness.

### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Information for the Product:

Based on information for component(s):

May cause moderate eye irritation.

May cause corneal injury.

#### Information for components:

##### **Calcium carbonate treated with stearic acid**

May cause slight temporary eye irritation.

Dust may irritate eyes.

##### **Distillates (petroleum), hydrotreated middle**

May cause slight eye irritation.

##### **Silicon dioxide**

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

##### **2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

May cause slight eye irritation.

May cause slight corneal injury.

##### **Titanium dioxide**

Solid or dust may cause irritation due to mechanical action.

##### **N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

##### **Vinyltri (methylethylketoxime) silane**

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

##### **Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s):

May cause slight eye irritation.

##### **Quartz**

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

##### **Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

May cause slight eye irritation.

May cause slight temporary corneal injury.

### Sensitization

#### For skin sensitization:

May cause an allergic skin reaction.

**For respiratory sensitization:**

Not classified based on available information.

**Information for the Product:**

For skin sensitization:

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

Contains component(s) which have demonstrated the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

**Information for components:**

**Calcium carbonate treated with stearic acid**

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

**Distillates (petroleum), hydrotreated middle**

For similar material(s):

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

For respiratory sensitization:

No relevant data found.

**Silicon dioxide**

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

For respiratory sensitization:

No relevant data found.

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

**Titanium dioxide**

Did not demonstrate the potential for contact allergy in mice.

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

For respiratory sensitization:

No relevant data found.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

**Vinyltri (methylethylketoxime) silane**

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For skin sensitization:

For similar material(s):

Has demonstrated the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

**Quartz**

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

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

Not classified based on available information.

**Information for the Product:**

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

**Information for components:**

**Calcium carbonate treated with stearic acid**

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

**Distillates (petroleum), hydrotreated middle**

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

**Silicon dioxide**

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

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

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

**Titanium dioxide**

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



**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

**Vinyltri (methylethylketoxime) silane**

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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

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.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

**Aspiration Hazard**

Not classified based on available information.

**Information for the Product:**

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

**Information for components:**

**Calcium carbonate treated with stearic acid**

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

**Distillates (petroleum), hydrotreated middle**

May be fatal if swallowed and enters airways.

**Silicon dioxide**

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

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

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

**Titanium dioxide**

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

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

**Vinyltri (methylethylketoxime) silane**

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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

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

**Quartz**

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

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

**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)**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Calcium carbonate treated with stearic acid**

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.

**Distillates (petroleum), hydrotreated middle**

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

**Silicon dioxide**

No relevant data found.

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

For similar material(s):

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

Blood

**Titanium dioxide**

Repeated excessive inhalation exposures to dusts may cause respiratory effects.

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

Lung.

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

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

Respiratory tract.

**Vinyltri (methylethylketoxime) silane**

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

Blood.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s):

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

Blood

**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.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

Blood

Kidney

Liver

Immune system.

**Carcinogenicity**

Not classified based on available information.

**Information for the Product:**

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:**

**Calcium carbonate treated with stearic acid**

No relevant data found.

**Distillates (petroleum), hydrotreated middle**

For similar material(s): Did not cause cancer in laboratory animals.

**Silicon dioxide**

No relevant data found.

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

No relevant data found.

**Titanium dioxide**

Lung fibrosis and tumors have been observed in rats exposed to titanium dioxide in two lifetime inhalation studies. Effects are believed to be due to overloading of the normal respiratory clearance mechanisms caused by the extreme study conditions. Workers exposed to titanium dioxide in the workplace have not shown an unusual incidence of chronic respiratory disease or lung cancer. Titaniumdioxide was not carcinogenic in laboratory animals in lifetime feeding studies. Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

No relevant data found.

**Vinyltri (methylethylketoxime) silane**

No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

No relevant data found.

**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.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

No relevant data found.

**Teratogenicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Calcium carbonate treated with stearic acid**

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

**Distillates (petroleum), hydrotreated middle**

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

**Silicon dioxide**

No relevant data found.

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

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

**Titanium dioxide**

No relevant data found.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

Did not cause birth defects in laboratory animals.

**Vinyltri (methylethylketoxime) silane**

No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

**Quartz**

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

**Bis(2-ethyl-2,5-dimethylhexanoyl)oxy(dimethyl)stannane**

No relevant data found.

**Reproductive toxicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Calcium carbonate treated with stearic acid**

For similar material(s): In animal studies, did not interfere with fertility. In animal studies, did not interfere with reproduction.

**Distillates (petroleum), hydrotreated middle**

For similar material(s): In animal studies, did not interfere with reproduction.

**Silicon dioxide**

No relevant data found.

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

For similar material(s): In animal studies, did not interfere with reproduction.

**Titanium dioxide**

No relevant data found.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

In animal studies, did not interfere with reproduction.

**Vinyltri (methylethylketoxime) silane**

No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): In animal studies, did not interfere with fertility. In animal studies, did not interfere with reproduction.

**Quartz**

No relevant data found.

**Bis(2-ethyl-2,5-dimethylhexanoyl)oxy(dimethyl)stannane**

No relevant data found.

**Mutagenicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Calcium carbonate treated with stearic acid**

For similar material(s): In vitro genetic toxicity studies were negative.

**Distillates (petroleum), hydrotreated middle**

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

**Silicon dioxide**

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

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

For similar material(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Titanium dioxide**

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

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

**Vinyltri (methylethylketoxime) silane**

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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): 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.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

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## SECTION 12: ECOLOGICAL INFORMATION

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*Ecotoxicological information appears in this section when such data are available.*

**Ecotoxicity**

**Calcium carbonate treated with stearic acid**

**Acute toxicity to fish**

No relevant data found.

**Distillates (petroleum), hydrotreated middle**

**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).  
LL50, *Scophthalmus maximus* (turbot), 96 Hour, > 1,028 mg/l, Test substance: Water Accommodated Fraction

**Acute toxicity to aquatic invertebrates**

LL50, *Acartia tonsa*, 48 Hour, > 3,193 mg/l, Test substance: Water Accommodated Fraction

**Acute toxicity to algae/aquatic plants**

EL50, *Skeletonema costatum* (marine diatom), 72 Hour, > 10,000 mg/l, Test substance: Water Accommodated Fraction

**Toxicity to bacteria**

EC50, 3 Hour, > 100 mg/l, OECD Test Guideline 209

**Chronic toxicity to aquatic invertebrates**

NOELR, *Ceriodaphnia dubia* (water flea), 8 d, > 100 mg/l, Test substance: Water Accommodated Fraction

**Silicon dioxide**

**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

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

**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).

For similar material(s):

LC50, Fathead minnow (*Pimephales promelas*), Static, 96 Hour, 843 mg/l, OECD Test Guideline 203

For similar material(s):

LC50, *Oryzias latipes* (Japanese medaka), Static, 96 Hour, > 100 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

For similar material(s):

EC50, *Daphnia magna* (Water flea), static test, 48 Hour, 201 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

For similar material(s):

EC50, *Selenastrum capricornutum* (green algae), Static, 72 Hour, Growth rate, 16 mg/l, OECD Test Guideline 201

For similar material(s):

NOEC, *Selenastrum capricornutum* (green algae), Static, 72 Hour, Growth rate, 2.6 mg/l, OECD Test Guideline 201

**Toxicity to bacteria**

For similar material(s):

EC50, activated sludge, 3 Hour, Respiration rates., > 390.45 mg/l, OECD Test Guideline 209

**Chronic toxicity to fish**

For similar material(s):

NOEC, Oryzias latipes (Orange-red killifish), flow-through test, 14 d, mortality, 50 mg/l

**Chronic toxicity to aquatic invertebrates**

For similar material(s):

NOEC, Daphnia magna, semi-static test, 21 d, number of offspring, > 100 mg/l

**Titanium dioxide**

**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).

NOEC, Leuciscus idus (Golden orfe), static test, 48 Hour, > 1,000 mg/l

**Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna (Water flea), static test, 48 Hour, > 1,000 mg/l

**Acute toxicity to algae/aquatic plants**

EC50, Pseudokirchneriella subcapitata (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

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

**Acute toxicity to fish**

Material is toxic to aquatic organisms (LC50/EC50/IC50 between 1 and 10 mg/L in the most sensitive species).

For the hydrolysis product(s)

LC50, zebra fish (Brachydanio rerio), 96 Hour, 597 mg/l

**Acute toxicity to aquatic invertebrates**

For the hydrolysis product(s)

EC50, Daphnia magna (Water flea), 48 Hour, 81 mg/l

**Acute toxicity to algae/aquatic plants**

For the hydrolysis product(s)

ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate inhibition, 8.8 mg/l

For the hydrolysis product(s)

NOEC, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate inhibition, 3.1 mg/l

**Toxicity to bacteria**

For the hydrolysis product(s)

EC50, Pseudomonas putida, 16 Hour, Growth inhibition, 67 mg/l

**Chronic toxicity to aquatic invertebrates**



For the hydrolysis product(s)  
NOEC, Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, > 1 mg/l

**Toxicity to Above Ground Organisms**

Material is moderately toxic to birds on an acute basis (LD50 between 51 and 500 mg/kg).

**Toxicity to soil-dwelling organisms**

NOEC, Eisenia fetida (earthworms), 14 d, >= 1,000 mg/kg

**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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

**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).  
For the hydrolysis product(s)  
LC50, Oncorhynchus mykiss (rainbow trout), Static, 96 Hour, > 120 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

For the hydrolysis product(s)  
EC50, Daphnia magna (Water flea), static test, 48 Hour, > 120 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

For the hydrolysis product(s)  
EC50, Selenastrum capricornutum (green algae), Static, 72 Hour, Growth rate, 94 mg/l, OECD Test Guideline 201  
For the hydrolysis product(s)  
NOEC, Selenastrum capricornutum (green algae), Static, 72 Hour, Growth rate, 30 mg/l, OECD Test Guideline 201

**Chronic toxicity to fish**

For similar material(s):  
NOEC, Oryzias latipes (Orange-red killifish), flow-through test, 14 d, 50 mg/l

**Chronic toxicity to aquatic invertebrates**

For similar material(s):  
NOEC, Daphnia magna, semi-static test, 21 d, > 100 mg/l

**Quartz**

**Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.

**Bis(2-ethyl-2,5-dimethylhexanoyl)oxy(dimethyl)stannane**

**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).

For similar material(s):  
LC50, Zebra fish (Danio/Brachydanio rerio), semi-static test, 96 Hour, > 100 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna, static test, 48 Hour, 39 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

ErC50, Algae (Scenedesmus subspicatus), Growth rate, 72 Hour, Growth rate, 7.6 mg/l, OECD Test Guideline 201 or Equivalent

For similar material(s):

NOEC, Algae (Scenedesmus subspicatus), Growth rate, 72 Hour, Growth rate, 1.1 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**

For similar material(s):

EC50, Bacteria, 3 Hour, Respiration rates., 14 mg/l

**Persistence and degradability**

**Calcium carbonate treated with stearic acid**

**Biodegradability:** No relevant data found.

**Distillates (petroleum), hydrotreated middle**

**Biodegradability:** Material is expected to be readily biodegradable.

10-day Window: Not applicable

**Biodegradation:** 74 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 306

**Silicon dioxide**

**Biodegradability:** Biodegradation is not applicable.

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

**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.

10-day Window: Fail

**Biodegradation:** 20 - 28 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301C or Equivalent

**Titanium dioxide**

**Biodegradability:** Biodegradation is not applicable.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

**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.

10-day Window: Fail

**Biodegradation:** 39 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301A or Equivalent

**Theoretical Oxygen Demand:** 2.39 mg/mg Estimated.

**Chemical Oxygen Demand:** 1.76 mg/mg Estimated.

**Biological oxygen demand (BOD)**

Incubation Time	BOD
5 d	23 %
10 d	30 %
20 d	29 %

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

Hydrolysis, half-life, 0.025 Hour, pH 7

**Photodegradation**

**Test Type:** Half-life (indirect photolysis)

**Sensitization:** OH radicals

**Atmospheric half-life:** 0.088 d

**Method:** Estimated.

**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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

**Biodegradability:** For similar material(s): This material rapidly hydrolyzes to products that are either readily or ultimately biodegradable.

10-day Window: Fail

**Biodegradation:** 0 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301A

**Quartz**

**Biodegradability:** Biodegradation is not applicable.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

**Biodegradability:** For similar material(s): Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

For similar material(s): 10-day Window: Fail

**Biodegradation:** 3 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301F or Equivalent

#### Bioaccumulative potential

##### Calcium carbonate treated with stearic acid

Bioaccumulation: No relevant data found.

##### Distillates (petroleum), hydrotreated middle

Bioaccumulation: No relevant data found.

##### Silicon dioxide

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

##### 2-Butanone, O,O',O''-(methylsilyldiyl)trioxime

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

Partition coefficient: n-octanol/water(log Pow): 1.69 Estimated by Structure-Activity Relationship (SAR).

##### N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine

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

Partition coefficient: n-octanol/water(log Pow): < 3 estimated

##### Vinyltri (methylethylketoxime) silane

Bioaccumulation: No relevant data found.

##### Methyltri(ethylmethylketoxime)silane isomers and oligomers

Bioaccumulation: For similar material(s): Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).

Partition coefficient: n-octanol/water(log Pow): 11.2

##### Quartz

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

##### Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane

Bioaccumulation: No relevant data found.

#### Mobility in Soil

##### Calcium carbonate treated with stearic acid

No relevant data found.

##### Distillates (petroleum), hydrotreated middle

No relevant data found.

##### Silicon dioxide

Partition coefficient (Koc): 21.73

##### 2-Butanone, O,O',O''-(methylsilyldiyl)trioxime

No relevant data found.

##### N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Partition coefficient (Koc): > 5000 Estimated.

**Vinyltri (methylethylketoxime) silane**

No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

No relevant data found.

**Quartz**

No relevant data found.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

No relevant data found.

**Results of PBT and vPvB assessment**

**Calcium carbonate treated with stearic acid**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Distillates (petroleum), hydrotreated middle**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Silicon dioxide**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Titanium dioxide**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Vinyltri (methylethylketoxime) silane**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Quartz**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Other adverse effects**

**Calcium carbonate treated with stearic acid**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Distillates (petroleum), hydrotreated middle**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Silicon dioxide**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Titanium dioxide**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Vinyltri (methylethylketoxime) silane**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Quartz**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Bis(2-ethyl-2,5-dimethylhexanoyl)oxy(dimethyl)stannane**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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**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 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.

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## SECTION 14: TRANSPORT INFORMATION

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### ADG

Not regulated for transport

### Classification for SEA transport (IMO-IMDG):

	Not regulated for transport
<b>Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code</b>	Consult IMO regulations before transporting ocean bulk

### Classification for AIR transport (IATA/ICAO):

Not regulated for transport

### Hazchem Code

None Allocated

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.

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## SECTION 15: REGULATORY INFORMATION

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### Poison Schedule

Not Scheduled

### Australian Inventory of Industrial Chemicals (AIIC)

All substances contained in this product are listed on the Australian Inventory of Industrial Chemicals, or are not required to be listed.

Prohibition/Licensing Requirements : Refer to model WHS Act and Regulations for prohibition, authorisation and restricted use.

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## SECTION 16: ANY OTHER RELEVANT INFORMATION

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### Revision

Identification Number: 4018243 / A142 / Issue Date: 19.12.2022 / Version: 5.0

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)
AU OEL	Australia. Workplace Exposure Standards for Airborne Contaminants.
Dow IHG	Dow Industrial Hygiene Guideline
STEL	Exposure standard - short term exposure limit
TWA	Time weighted average
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

### Full text of other abbreviations

AIIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System



DOW CHEMICAL (AUSTRALIA) PTY LTD 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.

AU



# SAFETY DATA SHEET

DOW CHEMICAL (AUSTRALIA) PTY LTD

**Product name: DOWSIL™ 580 (AUS) Glass, Metal and Masonry Sealant Translucent**

**Issue Date: 14.07.2022**

**Print Date: 15.07.2022**

DOW CHEMICAL (AUSTRALIA) PTY LTD 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.

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## SECTION 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

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**Product name:** DOWSIL™ 580 (AUS) Glass, Metal and Masonry Sealant Translucent

**Recommended use of the chemical and restrictions on use**

**Identified uses:** Adhesive, binding agents

**COMPANY IDENTIFICATION**

DOW CHEMICAL (AUSTRALIA) PTY LTD  
LEVEL 29  
367 COLLINS STREET  
MELBOURNE VIC 3000  
AUSTRALIA

**Customer Information Number:**

1800-780-074  
SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER**

**24-Hour Emergency Contact:** 1800-033-882

**Local Emergency Contact:** 1800-033-882

**For advice, contact a doctor (at once) or the Australian Poisons Information Centre: 131 126**

**Transport Emergency Only Dial 000**

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## SECTION 2: HAZARD(S) IDENTIFICATION

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**GHS Classification**

Skin corrosion/irritation - Category 2

Serious eye damage/eye irritation - Category 2A

Skin sensitisation - Category 1

**GHS label elements**

**Hazard pictograms**



Signal word: **WARNING!**

**Hazard statements**

Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.

**Precautionary statements**

**Prevention**

Avoid breathing dust.  
Wash skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves/ eye protection/ face protection.

**Response**

IF ON SKIN: Wash with plenty of water.  
If skin irritation or rash occurs: Get medical advice/ attention.  
If eye irritation persists: Get medical advice/ attention.  
Take off contaminated clothing and wash it before reuse.

**Disposal**

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

**Other hazards**

No data available

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**SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS, IN ACCORDANCE WITH SCHEDULE 8**

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This product is a mixture.

<b>Component</b>	<b>CASRN</b>	<b>Concentration</b>
2-Butanone, O,O',O''-(methylsilylidyne)trioxime	22984-54-9	>= 5.0 - <= 6.0 %
Methyltrichlorosilane treated Silica	121375-93-7	>= 4.4 - <= 4.9 %

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Silicon dioxide	7631-86-9	>= 3.4 - <= 4.3 %
3-Aminopropyltriethoxysilane	919-30-2	>= 0.8 - <= 1.2 %
Methyltri(ethylmethylketoxime)silane isomers and oligomers	Not available	<= 0.56 %
Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)siloxane	68928-76-7	>= 0.12 - <= 0.16 %

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## **SECTION 4: FIRST AID MEASURES**

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### **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. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

**Skin contact:** Wash off with plenty of water.

**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:** If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

#### **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:** Maintain adequate ventilation and oxygenation of the patient. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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## **SECTION 5: FIREFIGHTING MEASURES**

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### **Hazchem Code**

None Allocated

### **Extinguishing media**

**Suitable extinguishing media:** Alcohol-resistant foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray.

**Unsuitable extinguishing media:** None known..

### **Special hazards arising from the substance or mixture**

**Hazardous combustion products:** Carbon oxides. Silicon oxides. Nitrogen oxides (NO<sub>x</sub>). Chlorine compounds.

**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..

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## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**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.

## SECTION 7: HANDLING AND STORAGE, INCLUDING HOW THE CHEMICAL MAY BE SAFELY USED

**Precautions for safe handling:** Do not get on skin or clothing. Do not swallow. Do not get in eyes. 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 only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

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

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

## SECTION 8: EXPOSURE CONTROLS AND 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
Methyltrichlorosilane treated Silica	Dow IHG	TWA Respirable dust	2 mg/m3
	Dow IHG	TWA Total dust	6 mg/m3
	AU OEL	TWA Respirable dust	2 mg/m3
Silicon dioxide	Dow IHG	TWA Respirable dust	2 mg/m3
	Dow IHG	TWA Total dust	6 mg/m3
	AU OEL	TWA Respirable dust	2 mg/m3
3-Aminopropyltriethoxysilane	Dow IHG	TWA	0.5 mg/m3
	ACGIH	TWA	0.1 mg/m3 , Tin
Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane	Further information: A4: Not classifiable as a human carcinogen; Skin: Danger of cutaneous absorption		
	ACGIH	STEL	0.2 mg/m3 , Tin
	Further information: A4: Not classifiable as a human carcinogen; Skin: Danger of cutaneous absorption		
	AU OEL	TWA	0.1 mg/m3 , Tin
	Further information: Sk: Skin absorption		
	AU OEL	STEL	0.2 mg/m3 , Tin
	Further information: Sk: Skin absorption		
Ethanol	ACGIH	TWA	1,000 ppm
	Further information: URT irr: Upper Respiratory Tract irritation		
	ACGIH	STEL	1,000 ppm
	Further information: URT irr: Upper Respiratory Tract irritation		
	AU OEL	TWA	1,880 mg/m3 1,000 ppm
Methyl Ethyl Ketoxime	US WEEL	TWA	10 ppm

	Further information: DSEN: Dermal Sensitization Notation		
	Dow IHG	TWA	0.15 ppm
	Further information: Skin Sensitizer		

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

Ethanol

Methyl ethyl ketoxime

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.

### **Individual protection measures**

**Eye/face protection:** Use chemical goggles.

#### **Skin protection**

**Hand protection:** Use chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. 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"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to AS/NZS 2161.10) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to AS/NZS 2161.10) is recommended. **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: Multi-gas cartridge.

**Other Information:** Selection and use of personal protective equipment should be in accordance with the recommendations in one or more of the relevant Australian/New Zealand Standards, including:

AS/NZS 1336: Eye and face protection – Guidelines.

AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications.

AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment.  
AS/NZS 2161: Occupational protective gloves.  
AS/NZS 2210: Occupational protective footwear.  
AS/NZS 4501: Occupational protective clothing Set

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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<b>Physical state</b>	paste
<b>Color</b>	white translucent
<b>Odor</b>	slight
<b>Odor Threshold</b>	No data available
<b>pH</b>	Not applicable
<b>Melting point/freezing point</b>	
<b>Melting point/range</b>	No data available
<b>Freezing point</b>	No data available
<b>Boiling point, initial boiling point and boiling range</b>	
<b>Boiling point (760 mmHg)</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Evaporation Rate (Butyl Acetate = 1)</b>	Not applicable
<b>Flammability</b>	
<b>Flammability (solid, gas)</b>	Not classified as a flammability hazard
<b>Flammability (liquids)</b>	No data available
<b>Lower explosion limit and upper explosion limit / flammability limit</b>	
<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Vapor Pressure</b>	Not applicable
<b>Relative vapour density</b>	
<b>Relative Vapor Density (air = 1)</b>	No data available
<b>Density and / or relative density</b>	
<b>Relative Density (water = 1)</b>	1.03
<b>Solubility(ies)</b>	
<b>Water solubility</b>	No data available
<b>Partition coefficient: n-octanol/water (log value)</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Dynamic Viscosity</b>	Not applicable
<b>Kinematic Viscosity</b>	Not applicable
<b>Explosive properties</b>	Not explosive
<b>Oxidizing properties</b>	The substance or mixture is not classified as oxidizing.
<b>Molecular weight</b>	No data available



**Particle characteristics**

**Particle size** No data available

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

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**SECTION 10: STABILITY AND REACTIVITY**

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**Reactivity:** Not classified as a reactivity hazard.

**Chemical stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** Can react with strong oxidizing agents.

**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: Formaldehyde. Methyl Ethyl Ketoxime. Ethanol.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

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

**Exposure routes**

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**

**Information for the Product:**

Very low toxicity if swallowed. Swallowing may result in irritation of the mouth, throat, and gastrointestinal tract.

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:**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

LD50, Rat, male and female, 2,463 mg/kg OECD Test Guideline 401

**Methyltrichlorosilane treated Silica**

Based on data from similar materials LD50, Rat, > 5,000 mg/kg

**Silicon dioxide**

LD50, Rat, > 5,000 mg/kg

**3-Aminopropyltriethoxysilane**

LD50, Rat, female, 1,479 mg/kg

LD50, Rat, male, 2,665 mg/kg

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): LD50, Rat, male and female, 2,463 mg/kg OECD Test Guideline 401

**Bis(2-ethyl-2,5-dimethylhexanoyl)oxy(dimethyl)stannane**

LD50, Rat, male and female, 892 mg/kg OECD 401 or equivalent

**Acute dermal toxicity**

**Information for the Product:**

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:**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

LD50, Rat, male and female, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

**Methyltrichlorosilane treated Silica**

For similar material(s): LD50, Rabbit, > 2,000 mg/kg No deaths occurred at this concentration.

**Silicon dioxide**

LD50, Rabbit, > 5,000 mg/kg

**3-Aminopropyltriethoxysilane**

Based on product testing: LD50, Rabbit, male and female, 4,041 mg/kg

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): LD50, Rat, male and female, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

**Bis(2-ethyl-2,5-dimethylhexanoyl)oxy(dimethyl)stannane**

LD50, Rat, > 2,000 mg/kg

**Acute inhalation toxicity**

**Information for the Product:**

At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material may cause respiratory irritation. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.

As product: The LC50 has not been determined.

**Information for components:**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

The LC50 has not been determined.

**Methyltrichlorosilane treated Silica**

For similar material(s): LC50, Rat, 4 Hour, dust/mist, > 0.477 mg/l

**Silicon dioxide**

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

**3-Aminopropyltriethoxysilane**

Based on product testing: LC50, Rat, male, 6 Hour, vapour, > 5 ppm No deaths occurred at this concentration.

Based on product testing: LC50, Rat, female, 6 Hour, vapour, > 16 ppm No deaths occurred at this concentration.

Based on product testing: LC50, Rat, male and female, 4 Hour, Aerosol, > 7.35 mg/l

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

The LC50 has not been determined.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

As product: The LC50 has not been determined.

**Skin corrosion/irritation**

**Information for the Product:**

Based on information for component(s):  
Brief contact may cause moderate skin irritation with local redness.  
May cause drying and flaking of the skin.

**Information for components:**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

Brief contact may cause slight skin irritation with local redness.

**Methyltrichlorosilane treated Silica**

Brief contact is essentially nonirritating to skin.  
May cause skin irritation due to mechanical abrasion.

**Silicon dioxide**

Brief contact is essentially nonirritating to skin.  
May cause skin irritation due to mechanical abrasion.  
May cause drying and flaking of the skin.

**3-Aminopropyltriethoxysilane**

Brief contact may cause severe skin burns. Symptoms may include pain, severe local redness and tissue damage.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

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

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

Brief contact may cause skin irritation with local redness.

**Serious eye damage/eye irritation**

**Information for the Product:**

Based on information for component(s):  
May cause moderate eye irritation.  
May cause corneal injury.

**Information for components:**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

May cause slight eye irritation.  
May cause slight corneal injury.

**Methyltrichlorosilane treated Silica**

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

**Silicon dioxide**

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

**3-Aminopropyltriethoxysilane**

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.  
Vapor or mist may cause eye irritation.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s):  
May cause slight eye irritation.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

May cause slight eye irritation.  
May cause slight temporary corneal injury.

**Sensitization**

**Information for the Product:**

For skin sensitization:

Contains component(s) which have demonstrated the potential for contact allergy in mice.

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

For respiratory sensitization:

No relevant data found.

**Information for components:**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

For skin sensitization:

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

**Methyltrichlorosilane treated Silica**

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

**Silicon dioxide**

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

For respiratory sensitization:

No relevant data found.

**3-Aminopropyltriethoxysilane**

For skin sensitization:

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For skin sensitization:

For similar material(s):

Has demonstrated the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

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

**Information for the Product:**

Product test data not available.

**Information for components:**

**2-Butanone, O,O',O''-(methylsilyldyne)trioxime**

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

**Methyltrichlorosilane treated Silica**

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

**Silicon dioxide**

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

**3-Aminopropyltriethoxysilane**

Material is corrosive. Material is not classified as a respiratory irritant; however, upper respiratory tract irritation or corrosivity may be expected.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

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

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

**Aspiration Hazard**

**Information for the Product:**

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

**Information for components:**

**2-Butanone, O,O',O''-(methylsilyldyne)trioxime**

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

**Methyltrichlorosilane treated Silica**

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

**Silicon dioxide**

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

**3-Aminopropyltriethoxysilane**

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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

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

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

**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)

#### Information for the Product:

Product test data not available.

#### Information for components:

##### 2-Butanone, O,O',O''-(methylsilylidyne)trioxime

For similar material(s):

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

Blood

##### Methyltrichlorosilane treated Silica

For similar material(s):

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

Liver

These effects were only observed at exaggerated doses.

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

##### Silicon dioxide

No relevant data found.

##### 3-Aminopropyltriethoxysilane

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

Liver.

##### Methyltri(ethylmethylketoxime)silane isomers and oligomers

For similar material(s):

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

Blood

##### Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane

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

Blood

Kidney

Liver

Immune system.

### Carcinogenicity

#### Information for the Product:

Product test data not available.

#### Information for components:

##### 2-Butanone, O,O',O''-(methylsilylidyne)trioxime

No relevant data found.

##### Methyltrichlorosilane treated Silica

For similar material(s): Did not cause cancer in laboratory animals.

**Silicon dioxide**

No relevant data found.

**3-Aminopropyltriethoxysilane**

Did not cause cancer in laboratory animals.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

No relevant data found.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

No relevant data found.

**Teratogenicity**

**Information for the Product:**

Product test data not available.

**Information for components:**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

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

**Methyltrichlorosilane treated Silica**

No relevant data found.

**Silicon dioxide**

No relevant data found.

**3-Aminopropyltriethoxysilane**

Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

No relevant data found.

**Reproductive toxicity**

**Information for the Product:**

Product test data not available.

**Information for components:**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

For similar material(s): In animal studies, did not interfere with reproduction.



**Methyltrichlorosilane treated Silica**

For similar material(s): In animal studies, did not interfere with reproduction.

**Silicon dioxide**

No relevant data found.

**3-Aminopropyltriethoxysilane**

In animal studies, did not interfere with fertility.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): In animal studies, did not interfere with fertility. In animal studies, did not interfere with reproduction.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

No relevant data found.

**Mutagenicity**

**Information for the Product:**

Product test data not available.

**Information for components:**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

For similar material(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Methyltrichlorosilane treated Silica**

For similar material(s): In vitro genetic toxicity studies were negative.

**Silicon dioxide**

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

**3-Aminopropyltriethoxysilane**

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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

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## SECTION 12: ECOLOGICAL INFORMATION

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

**Ecotoxicity**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

**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).

For similar material(s):

LC50, Fathead minnow (*Pimephales promelas*), Static, 96 Hour, 843 mg/l, OECD Test Guideline 203

For similar material(s):

LC50, *Oryzias latipes* (Japanese medaka), Static, 96 Hour, > 100 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

For similar material(s):

EC50, *Daphnia magna* (Water flea), static test, 48 Hour, 201 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

For similar material(s):

NOEC, *Selenastrum capricornutum* (green algae), Static, 72 Hour, Growth rate, 2.6 mg/l, OECD Test Guideline 201

For similar material(s):

EC50, *Selenastrum capricornutum* (green algae), Static, 72 Hour, Growth rate, 16 mg/l, OECD Test Guideline 201

**Toxicity to bacteria**

For similar material(s):

EC50, activated sludge, 3 Hour, Respiration rates., > 390.45 mg/l, OECD Test Guideline 209

**Chronic toxicity to fish**

For similar material(s):

NOEC, *Oryzias latipes* (Orange-red killifish), flow-through test, 14 d, mortality, 50 mg/l

**Chronic toxicity to aquatic invertebrates**

For similar material(s):

NOEC, *Daphnia magna*, semi-static test, 21 d, number of offspring, > 100 mg/l

**Methyltrichlorosilane treated 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).

For similar material(s):

LC50, zebra fish (*Brachydanio rerio*), 96 Hour, > 1,000 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

For similar material(s):

EC50, *Daphnia magna* (Water flea), 24 Hour, > 1,000 mg/l, OECD Test Guideline 202

**Silicon dioxide**

**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

**3-Aminopropyltriethoxysilane**

**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), semi-static test, 96 Hour, > 934 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna (Water flea), static test, 48 Hour, 331 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

ErC50, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, > 1,000 mg/l  
NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, 1.3 mg/l

**Toxicity to bacteria**

EC50, Pseudomonas putida, 5.75 Hour, Respiration rates., 43 mg/l

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

**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).  
For the hydrolysis product(s)  
LC50, Oncorhynchus mykiss (rainbow trout), Static, 96 Hour, > 120 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

For the hydrolysis product(s)  
EC50, Daphnia magna (Water flea), static test, 48 Hour, > 120 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

For the hydrolysis product(s)  
EC50, Selenastrum capricornutum (green algae), Static, 72 Hour, Growth rate, 94 mg/l, OECD Test Guideline 201  
For the hydrolysis product(s)  
NOEC, Selenastrum capricornutum (green algae), Static, 72 Hour, Growth rate, 30 mg/l, OECD Test Guideline 201

**Chronic toxicity to fish**

For similar material(s):  
NOEC, Oryzias latipes (Orange-red killifish), flow-through test, 14 d, 50 mg/l

**Chronic toxicity to aquatic invertebrates**

For similar material(s):

NOEC, Daphnia magna, semi-static test, 21 d, > 100 mg/l

**Bis(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

**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).

For similar material(s):

LC50, Zebra fish (Danio/Brachydanio rerio), semi-static test, 96 Hour, > 100 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna, static test, 48 Hour, 39 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

ErC50, Algae (Scenedesmus subspicatus), Growth rate, 72 Hour, Growth rate, 7.6 mg/l, OECD Test Guideline 201 or Equivalent

For similar material(s):

NOEC, Algae (Scenedesmus subspicatus), Growth rate, 72 Hour, Growth rate, 1.1 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**

For similar material(s):

EC50, Bacteria, 3 Hour, Respiration rates., 14 mg/l

**Persistence and degradability**

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

**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.

10-day Window: Fail

**Biodegradation:** 20 - 28 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301C or Equivalent

**Methyltrichlorosilane treated Silica**

**Biodegradability:** Biodegradation is not applicable.

**Silicon dioxide**

**Biodegradability:** Biodegradation is not applicable.

**3-Aminopropyltriethoxysilane**

**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.

10-day Window: Fail

**Biodegradation:** 67 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301A or Equivalent

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

Hydrolysis, half-life, 8.5 Hour, pH 7, Half-life Temperature 24.7 °C

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

**Biodegradability:** For similar material(s): This material rapidly hydrolyzes to products that are either readily or ultimately biodegradable.

10-day Window: Fail

**Biodegradation:** 0 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301A

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

**Biodegradability:** For similar material(s): Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

For similar material(s): 10-day Window: Fail

**Biodegradation:** 3 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301F or Equivalent

**Bioaccumulative potential**

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

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

**Partition coefficient: n-octanol/water(log Pow):** 1.69 Estimated by Structure-Activity Relationship (SAR).

**Methyltrichlorosilane treated Silica**

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

**Silicon dioxide**

**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

**3-Aminopropyltriethoxysilane**

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

**Partition coefficient: n-octanol/water(log Pow):** 1.7 at 20 °C Calculated.

**Bioconcentration factor (BCF):** 3.4 Cyprinus carpio (Carp) 56 d

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

**Bioaccumulation:** For similar material(s): Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).

**Partition coefficient: n-octanol/water(log Pow):** 11.2

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

**Bioaccumulation:** No relevant data found.

**Mobility in Soil**

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

No relevant data found.

**Methyltrichlorosilane treated Silica**

No relevant data found.

**Silicon dioxide**

Partition coefficient (Koc): 21.73

**3-Aminopropyltriethoxysilane**

No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

No relevant data found.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

No relevant data found.

**Results of PBT and vPvB assessment**

**2-Butanone, O,O',O''-(methylsilyldiyne)trioxime**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Methyltrichlorosilane treated Silica**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Silicon dioxide**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**3-Aminopropyltriethoxysilane**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Other adverse effects**

**2-Butanone, O,O',O''-(methylsilyldiyne)trioxime**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Methyltrichlorosilane treated Silica**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Silicon dioxide**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**3-Aminopropyltriethoxysilane**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

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## SECTION 13: DISPOSAL CONSIDERATIONS

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**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.

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## SECTION 14: TRANSPORT INFORMATION

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**ADG**

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

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

Not regulated for transport  
Consult IMO regulations before transporting ocean bulk

**Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

**Hazchem Code**

None Allocated

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.

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## SECTION 15: REGULATORY INFORMATION

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**Poison Schedule**  
Not Scheduled

**Australian Inventory of Industrial Chemicals (AIIC)**

All substances contained in this product are listed on the Australian Inventory of Industrial Chemicals, or are not required to be listed.

The product contains one or more substances that are subject to a specific information requirement by the Australian Industrial Chemicals Introduction Scheme (AICIS).

Prohibition/Licensing Requirements : Refer to model WHS Act and Regulations for prohibition, authorisation and restricted use.

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## SECTION 16: ANY OTHER RELEVANT INFORMATION

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**Revision**

Identification Number: 4018248 / A142 / Issue Date: 14.07.2022 / Version: 8.0

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)
AU OEL	Australia. Workplace Exposure Standards for Airborne Contaminants.
Dow IHG	Dow Industrial Hygiene Guideline
STEL	Exposure standard - short term exposure limit
TWA	Time weighted average
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

**Full text of other abbreviations**

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen,



Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

DOW CHEMICAL (AUSTRALIA) PTY LTD 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.

AU



# SAFETY DATA SHEET

DOW CHEMICAL (AUSTRALIA) PTY LTD

**Product name: DOWSIL™ 580 (AUS) Glass, Metal and Masonry Sealant Black**

**Issue Date: 30.11.2022**

**Print Date: 01.12.2022**

DOW CHEMICAL (AUSTRALIA) PTY LTD 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.

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## SECTION 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

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**Product name:** DOWSIL™ 580 (AUS) Glass, Metal and Masonry Sealant Black

**Recommended use of the chemical and restrictions on use**

**Identified uses:** Adhesive, binding agents

**COMPANY IDENTIFICATION**

DOW CHEMICAL (AUSTRALIA) PTY LTD  
LEVEL 29  
367 COLLINS STREET  
MELBOURNE VIC 3000  
AUSTRALIA

**Customer Information Number:**

1800-780-074  
SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER**

**24-Hour Emergency Contact:** 1800-033-882

**Local Emergency Contact:** 1800-033-882

**For advice, contact a doctor (at once) or the Australian Poisons Information Centre: 131 126**

**Transport Emergency Only Dial 000**

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## SECTION 2: HAZARD(S) IDENTIFICATION

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**GHS Classification**

Serious eye damage/eye irritation - Category 2A

Skin sensitisation - Category 1

**GHS label elements**

**Hazard pictograms**



Signal word: **WARNING!**

**Hazard statements**

May cause an allergic skin reaction.  
Causes serious eye irritation.

**Precautionary statements**

**Prevention**

Avoid breathing dust.  
Wash skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves/ eye protection/ face protection.

**Response**

IF ON SKIN: Wash with plenty of water.  
If skin irritation or rash occurs: Get medical advice/ attention.  
If eye irritation persists: Get medical advice/ attention.  
Take off contaminated clothing and wash it before reuse.

**Disposal**

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

**Other hazards**

No data available

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**SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS, IN ACCORDANCE WITH SCHEDULE 8**

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This product is a mixture.

<b>Component</b>	<b>CASRN</b>	<b>Concentration</b>
Calcium carbonate treated with stearic acid	Not available	>= 36.0 - <= 46.0 %
Distillates (petroleum), hydrotreated middle	64742-46-7	>= 2.0 - <= 7.0 %
Silicon dioxide	7631-86-9	>= 3.0 - <= 6.0 %
2-Butanone, O,O',O''-(methylsilylidyne)trioxime	22984-54-9	>= 2.9 - <= 4.9 %
N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine	1760-24-3	>= 0.5 - <= 1.2 %

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Vinyltri (methylethylketoxime) silane	2224-33-1	>= 0.14 - <= 0.69 %
Methyltri(ethylmethylketoxime)silane isomers and oligomers	Not available	>= 0.28 - <= 0.49 %
Quartz	14808-60-7	>= 0.29 - <= 0.47 %
Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)siloxane	68928-76-7	>= 0.04 - <= 0.15 %

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## **SECTION 4: FIRST AID MEASURES**

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### **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. Suitable emergency safety shower facility should be available in work area.

**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:** If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

#### **Most important symptoms and effects, both acute and delayed:**

May cause an allergic skin reaction. Causes serious eye irritation.

#### **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. Skin contact may aggravate preexisting dermatitis.

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## **SECTION 5: FIREFIGHTING MEASURES**

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### **Hazchem Code**

None Allocated

### **Extinguishing media**

**Suitable extinguishing media:** Alcohol-resistant foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray.

**Unsuitable extinguishing media:** None known..

### **Special hazards arising from the substance or mixture**

**Hazardous combustion products:** Metal oxides. Formaldehyde. Carbon oxides. Silicon oxides. Nitrogen oxides (NO<sub>x</sub>).

**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..

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## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**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.

## SECTION 7: HANDLING AND STORAGE, INCLUDING HOW THE CHEMICAL MAY BE SAFELY USED

**Precautions for safe handling:** Do not get on skin or clothing. Do not swallow. Do not get in eyes. 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 only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

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

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

## SECTION 8: EXPOSURE CONTROLS AND 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
Calcium carbonate treated with stearic acid	Dow IHG	TWA	1 mg/m3
	AU OEL	TWA	10 mg/m3 , Calcium carbonate
Distillates (petroleum), hydrotreated middle	AU OEL	TWA Mist	5 mg/m3
Silicon dioxide	Dow IHG	TWA Respirable dust	2 mg/m3
	Dow IHG	TWA Total dust	6 mg/m3
	AU OEL	TWA Respirable dust	2 mg/m3
N-(3-(Trimethoxysilyl)propyl)-1,2-ethanediamine	Dow IHG		See Further information
	Further information: Skin Sensitizer		
Quartz	ACGIH	TWA Respirable particulate matter	0.025 mg/m3 , Silica
	Further information: lung cancer: Lung cancer; pulm fibrosis: Pulmonary fibrosis; A2: Suspected human carcinogen		
	AU OEL	TWA Respirable dust	0.1 mg/m3
Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane	ACGIH	TWA	0.1 mg/m3 , Tin
	Further information: A4: Not classifiable as a human carcinogen; Skin: Danger of cutaneous absorption		
	ACGIH	STEL	0.2 mg/m3 , Tin
	Further information: A4: Not classifiable as a human carcinogen; Skin: Danger of cutaneous absorption		
	AU OEL	TWA	0.1 mg/m3 , Tin
	Further information: Sk: Skin absorption		

	AU OEL	STEL	0.2 mg/m3 , Tin
	Further information: Sk: Skin absorption		
Methyl Ethyl Ketoxime	US WEEL	TWA	10 ppm
	Further information: DSEN: Dermal Sensitization Notation		
	Dow IHG	TWA	0.15 ppm
	Further information: Skin Sensitizer		
Methanol	ACGIH	TWA	200 ppm
	Further information: Skin: Danger of cutaneous absorption		
	ACGIH	STEL	250 ppm
	Further information: Skin: Danger of cutaneous absorption		
	AU OEL	TWA	262 mg/m3 200 ppm
	Further information: Sk: Skin absorption		
	AU OEL	STEL	328 mg/m3 250 ppm
	Further information: Sk: Skin absorption		

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

Methanol.

Methyl ethyl ketoxime

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.

**Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 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 chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. 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"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to AS/NZS 2161.10) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to AS/NZS 2161.10) is recommended. 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, use an approved respirator. When respiratory protection is required, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply.

**Other Information:** Selection and use of personal protective equipment should be in accordance with the recommendations in one or more of the relevant Australian/New Zealand Standards, including:  
AS/NZS 1336: Eye and face protection – Guidelines.  
AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications.  
AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment.  
AS/NZS 2161: Occupational protective gloves.  
AS/NZS 2210: Occupational protective footwear.  
AS/NZS 4501: Occupational protective clothing Set

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## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Physical state</b>	paste
<b>Color</b>	black
<b>Odor</b>	slight
<b>Odor Threshold</b>	No data available
<b>pH</b>	Not applicable
<b>Melting point/freezing point</b>	
<b>Melting point/range</b>	No data available
<b>Freezing point</b>	No data available
<b>Boiling point, initial boiling point and boiling range</b>	
<b>Boiling point (760 mmHg)</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Evaporation Rate (Butyl Acetate = 1)</b>	Not applicable
<b>Flammability</b>	
<b>Flammability (solid, gas)</b>	Not classified as a flammability hazard
<b>Flammability (liquids)</b>	No data available
<b>Lower explosion limit and upper explosion limit / flammability limit</b>	
<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Vapor Pressure</b>	Not applicable



**Relative vapour density**

Relative Vapor Density (air = 1) No data available

**Density and / or relative density**

Relative Density (water = 1) 1.38

**Solubility(ies)**

Water solubility No data available

**Partition coefficient: n-octanol/water (log value)**

No data available

**Auto-ignition temperature**

No data available

**Decomposition temperature**

No data available

**Dynamic Viscosity**

Not applicable

**Kinematic Viscosity**

Not applicable

**Explosive properties**

Not explosive

**Oxidizing properties**

The substance or mixture is not classified as oxidizing.

**Molecular weight**

No data available

**Particle characteristics**

Particle size No data available

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

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## SECTION 10: STABILITY AND REACTIVITY

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**Reactivity:** Not classified as a reactivity hazard.

**Chemical stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** Can react with strong oxidizing agents.

**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: Formaldehyde. Methyl Ethyl Ketoxime. Methanol.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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

**Exposure routes**

Eye contact, Skin contact, Ingestion.

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

**Acute Toxicity Endpoints:**

Not classified based on available information.

**Acute oral toxicity**

**Information for the Product:**

Very low toxicity if swallowed. May cause abdominal discomfort or diarrhea.

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

Based on information for component(s):  
LD50, Rat, > 5,000 mg/kg Estimated.

**Information for components:**

**Calcium carbonate treated with stearic acid**

Single dose oral LD50 has not been determined.

For similar material(s): LD50, Rat, > 2,000 mg/kg No deaths occurred at this concentration.

**Distillates (petroleum), hydrotreated middle**

LD50, Rat, > 5,000 mg/kg

**Silicon dioxide**

LD50, Rat, > 5,000 mg/kg

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

LD50, Rat, male and female, 2,463 mg/kg OECD Test Guideline 401

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

LD50, Rat, male and female, 2,295 mg/kg OPPTS 870.1100

This substance may hydrolyze to release Methanol. Methanol is highly toxic to humans and may cause central nervous system effects, visual disturbances up to blindness, metabolic acidosis, and degenerative damage to other organs including liver, kidney, and heart.

**Vinyltri (methylethylketoxime) silane**

LD50, Rat, > 2,000 mg/kg

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): LD50, Rat, male and female, 2,463 mg/kg OECD Test Guideline 401

**Quartz**

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

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

LD50, Rat, male and female, 892 mg/kg OECD 401 or equivalent

### Acute dermal toxicity

#### Information for the Product:

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

#### Information for components:

##### Calcium carbonate treated with stearic acid

The dermal LD50 has not been determined.

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

##### Distillates (petroleum), hydrotreated middle

LD50, Rabbit, > 3,160 mg/kg No deaths occurred at this concentration.

##### Silicon dioxide

LD50, Rabbit, > 5,000 mg/kg

##### 2-Butanone, O,O',O''-(methylsilylidyne)trioxime

LD50, Rat, male and female, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

##### N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine

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

This substance may hydrolyze to release Methanol. Effects of methanol are the same as observed via oral and inhalation exposure and include central nervous system (CNS) depression, visual impairment up to blindness, metabolic acidosis, with effects on organ systems such as liver, kidneys and heart, even death.

##### Vinyltri (methylethylketoxime) silane

LD50, Rat, > 2,000 mg/kg

##### Methyltri(ethylmethylketoxime)silane isomers and oligomers

For similar material(s): LD50, Rat, male and female, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

##### Quartz

The dermal LD50 has not been determined.

##### Bis[2-ethyl-2,5-dimethylhexanoyl]oxy[(dimethyl)stannane

LD50, Rat, > 2,000 mg/kg

### Acute inhalation toxicity

**Information for the Product:**

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:**

**Calcium carbonate treated with stearic acid**

The LC50 has not been determined.

**Distillates (petroleum), hydrotreated middle**

LC50, Rat, 4 Hour, dust/mist, > 5.2 mg/l No deaths occurred at this concentration.

**Silicon dioxide**

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

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

The LC50 has not been determined.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

LC50, Rat, 4 Hour, dust/mist, 1.49 - 2.44 mg/l OECD Test Guideline 403

This substance may hydrolyze to release Methanol. Inhalation of methanol may cause effects ranging from headache, narcosis and visual impairment to metabolic acidosis, blindness, and even death.

**Vinyltri (methylethylketoxime) silane**

The LC50 has not been determined.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

The LC50 has not been determined.

**Quartz**

The LC50 has not been determined.

**Bis(2-ethyl-2,5-dimethylhexanoyl)oxy(dimethyl)stannane**

As product: The LC50 has not been determined.

**Skin corrosion/irritation**

Not classified based on available information.

**Information for the Product:**

Based on information for component(s):  
Brief contact may cause slight skin irritation with local redness.  
May cause drying and flaking of the skin.

**Information for components:**

**Calcium carbonate treated with stearic acid**

Essentially nonirritating to skin.  
May cause drying and flaking of the skin.

**Distillates (petroleum), hydrotreated middle**

Brief contact may cause slight skin irritation with local redness.

**Silicon dioxide**

Brief contact is essentially nonirritating to skin.  
May cause skin irritation due to mechanical abrasion.  
May cause drying and flaking of the skin.

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

Brief contact may cause slight skin irritation with local redness.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

Brief contact may cause moderate skin irritation with local redness.

**Vinyltri (methylethylketoxime) silane**

Brief contact may cause slight skin irritation with local redness.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

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

**Quartz**

May cause skin irritation due to mechanical abrasion.  
May cause drying and flaking of the skin.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

Brief contact may cause skin irritation with local redness.

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Information for the Product:**

Based on information for component(s):  
May cause moderate eye irritation.  
May cause moderate corneal injury.

**Information for components:**

**Calcium carbonate treated with stearic acid**

May cause slight temporary eye irritation.  
Dust may irritate eyes.

**Distillates (petroleum), hydrotreated middle**

May cause slight eye irritation.

**Silicon dioxide**

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

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

May cause slight eye irritation.  
May cause slight corneal injury.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

**Vinyltri (methylethylketoxime) silane**

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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s):  
May cause slight eye irritation.

**Quartz**

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

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

May cause slight eye irritation.  
May cause slight temporary corneal injury.

**Sensitization**

**For skin sensitization:**

May cause an allergic skin reaction.

**For respiratory sensitization:**

Not classified based on available information.

**Information for the Product:**

For skin sensitization:

Contains component(s) which have caused allergic skin sensitization in guinea pigs.  
Contains component(s) which have demonstrated the potential for contact allergy in mice.

For respiratory sensitization:

No relevant information found.

**Information for components:**

**Calcium carbonate treated with stearic acid**

For skin sensitization:  
No relevant data found.

For respiratory sensitization:

No relevant data found.

**Distillates (petroleum), hydrotreated middle**

For similar material(s):  
Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:  
No relevant data found.

**Silicon dioxide**

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

For respiratory sensitization:  
No relevant data found.

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:  
No relevant data found.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:  
No relevant data found.

**Vinyltri (methylethylketoxime) silane**

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:  
No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For skin sensitization:  
For similar material(s):  
Has demonstrated the potential for contact allergy in mice.

For respiratory sensitization:  
No relevant data found.

**Quartz**

For skin sensitization:  
No relevant data found.

For respiratory sensitization:  
No relevant data found.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:  
No relevant data found.

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

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Calcium carbonate treated with stearic acid**

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

**Distillates (petroleum), hydrotreated middle**

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

**Silicon dioxide**

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

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

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

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

**Vinyltri (methylethylketoxime) silane**

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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

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.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

**Aspiration Hazard**

Not classified based on available information.

**Information for the Product:**

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

**Information for components:**

**Calcium carbonate treated with stearic acid**

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

**Distillates (petroleum), hydrotreated middle**

May be fatal if swallowed and enters airways.

**Silicon dioxide**

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

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**



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

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

**Vinyltri (methylethylketoxime) silane**

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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

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

**Quartz**

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

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

**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)**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Calcium carbonate treated with stearic acid**

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.

**Distillates (petroleum), hydrotreated middle**

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

**Silicon dioxide**

No relevant data found.

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

For similar material(s):

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

Blood

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

Respiratory tract.

**Vinyltri (methylethylketoxime) silane**

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

Blood.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s):

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

Blood

**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.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

Blood

Kidney

Liver

Immune system.

**Carcinogenicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Calcium carbonate treated with stearic acid**

No relevant data found.

**Distillates (petroleum), hydrotreated middle**

For similar material(s): Did not cause cancer in laboratory animals.

**Silicon dioxide**

No relevant data found.

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

No relevant data found.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

No relevant data found.

**Vinyltri (methylethylketoxime) silane**

No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

No relevant data found.

**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.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

No relevant data found.

**Teratogenicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Calcium carbonate treated with stearic acid**

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

**Distillates (petroleum), hydrotreated middle**

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

**Silicon dioxide**

No relevant data found.

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

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

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

Did not cause birth defects in laboratory animals.

**Vinyltri (methylethylketoxime) silane**

No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

**Quartz**

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

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

No relevant data found.

**Reproductive toxicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Calcium carbonate treated with stearic acid**

For similar material(s): In animal studies, did not interfere with fertility. In animal studies, did not interfere with reproduction.

**Distillates (petroleum), hydrotreated middle**

For similar material(s): In animal studies, did not interfere with reproduction.

**Silicon dioxide**

No relevant data found.

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

For similar material(s): In animal studies, did not interfere with reproduction.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

In animal studies, did not interfere with reproduction.

**Vinyltri (methylethylketoxime) silane**

No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): In animal studies, did not interfere with fertility. In animal studies, did not interfere with reproduction.

**Quartz**

No relevant data found.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

No relevant data found.

**Mutagenicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Calcium carbonate treated with stearic acid**

For similar material(s): In vitro genetic toxicity studies were negative.

**Distillates (petroleum), hydrotreated middle**

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

**Silicon dioxide**

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

**2-Butanone, O,O',O''-(methylsilylidyne)trioxime**

For similar material(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

**Vinyltri (methylethylketoxime) silane**

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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

For similar material(s): 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.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

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

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## SECTION 12: ECOLOGICAL INFORMATION

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

### Ecotoxicity

**Calcium carbonate treated with stearic acid**

**Acute toxicity to fish**

No relevant data found.

**Distillates (petroleum), hydrotreated middle**

**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).

LL50, *Scophthalmus maximus* (turbot), 96 Hour, > 1,028 mg/l, Test substance: Water Accommodated Fraction

**Acute toxicity to aquatic invertebrates**

LL50, *Acartia tonsa*, 48 Hour, > 3,193 mg/l, Test substance: Water Accommodated Fraction

**Acute toxicity to algae/aquatic plants**

EL50, *Skeletonema costatum* (marine diatom), 72 Hour, > 10,000 mg/l, Test substance: Water Accommodated Fraction

**Toxicity to bacteria**

EC50, 3 Hour, > 100 mg/l, OECD Test Guideline 209

**Chronic toxicity to aquatic invertebrates**

NOELR, Ceriodaphnia dubia (water flea), 8 d, > 100 mg/l, Test substance: Water Accommodated Fraction

**Silicon dioxide**

**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

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

**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).

For similar material(s):

LC50, Fathead minnow (Pimephales promelas), Static, 96 Hour, 843 mg/l, OECD Test Guideline 203

For similar material(s):

LC50, Oryzias latipes (Japanese medaka), Static, 96 Hour, > 100 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

For similar material(s):

EC50, Daphnia magna (Water flea), static test, 48 Hour, 201 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

For similar material(s):

EC50, Selenastrum capricornutum (green algae), Static, 72 Hour, Growth rate, 16 mg/l, OECD Test Guideline 201

For similar material(s):

NOEC, Selenastrum capricornutum (green algae), Static, 72 Hour, Growth rate, 2.6 mg/l, OECD Test Guideline 201

**Toxicity to bacteria**

For similar material(s):

EC50, activated sludge, 3 Hour, Respiration rates., > 390.45 mg/l, OECD Test Guideline 209

**Chronic toxicity to fish**

For similar material(s):

NOEC, Oryzias latipes (Orange-red killifish), flow-through test, 14 d, mortality, 50 mg/l

**Chronic toxicity to aquatic invertebrates**

For similar material(s):

NOEC, Daphnia magna, semi-static test, 21 d, number of offspring, > 100 mg/l

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

**Acute toxicity to fish**

Material is toxic to aquatic organisms (LC50/EC50/IC50 between 1 and 10 mg/L in the most sensitive species).

For the hydrolysis product(s)

LC50, zebra fish (*Brachydanio rerio*), 96 Hour, 597 mg/l

**Acute toxicity to aquatic invertebrates**

For the hydrolysis product(s)

EC50, *Daphnia magna* (Water flea), 48 Hour, 81 mg/l

**Acute toxicity to algae/aquatic plants**

For the hydrolysis product(s)

ErC50, *Pseudokirchneriella subcapitata* (green algae), 72 Hour, Growth rate inhibition, 8.8 mg/l

For the hydrolysis product(s)

NOEC, *Pseudokirchneriella subcapitata* (green algae), 72 Hour, Growth rate inhibition, 3.1 mg/l

**Toxicity to bacteria**

For the hydrolysis product(s)

EC50, *Pseudomonas putida*, 16 Hour, Growth inhibition, 67 mg/l

**Chronic toxicity to aquatic invertebrates**

For the hydrolysis product(s)

NOEC, *Daphnia magna* (Water flea), semi-static test, 21 d, number of offspring, > 1 mg/l

**Toxicity to Above Ground Organisms**

Material is moderately toxic to birds on an acute basis (LD50 between 51 and 500 mg/kg).

**Toxicity to soil-dwelling organisms**

NOEC, *Eisenia fetida* (earthworms), 14 d,  $\geq 1,000$  mg/kg

**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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

**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).

For the hydrolysis product(s)

LC50, *Oncorhynchus mykiss* (rainbow trout), Static, 96 Hour, > 120 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

For the hydrolysis product(s)

EC50, *Daphnia magna* (Water flea), static test, 48 Hour, > 120 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

For the hydrolysis product(s)

EC50, Selenastrum capricornutum (green algae), Static, 72 Hour, Growth rate, 94 mg/l, OECD Test Guideline 201

For the hydrolysis product(s)

NOEC, Selenastrum capricornutum (green algae), Static, 72 Hour, Growth rate, 30 mg/l, OECD Test Guideline 201

**Chronic toxicity to fish**

For similar material(s):

NOEC, Oryzias latipes (Orange-red killifish), flow-through test, 14 d, 50 mg/l

**Chronic toxicity to aquatic invertebrates**

For similar material(s):

NOEC, Daphnia magna, semi-static test, 21 d, > 100 mg/l

**Quartz**

**Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

**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).

For similar material(s):

LC50, Zebra fish (Danio/Brachydanio rerio), semi-static test, 96 Hour, > 100 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna, static test, 48 Hour, 39 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

ErC50, Algae (Scenedesmus subspicatus), Growth rate, 72 Hour, Growth rate, 7.6 mg/l, OECD Test Guideline 201 or Equivalent

For similar material(s):

NOEC, Algae (Scenedesmus subspicatus), Growth rate, 72 Hour, Growth rate, 1.1 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**

For similar material(s):

EC50, Bacteria, 3 Hour, Respiration rates., 14 mg/l

**Persistence and degradability**

**Calcium carbonate treated with stearic acid**

**Biodegradability:** No relevant data found.

**Distillates (petroleum), hydrotreated middle**

**Biodegradability:** Material is expected to be readily biodegradable.

10-day Window: Not applicable

**Biodegradation:** 74 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 306

**Silicon dioxide**



**Biodegradability:** Biodegradation is not applicable.

**2-Butanone, O,O',O''-(methylsilyldyne)trioxime**

**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.

10-day Window: Fail

**Biodegradation:** 20 - 28 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301C or Equivalent

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

**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.

10-day Window: Fail

**Biodegradation:** 39 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301A or Equivalent

**Theoretical Oxygen Demand:** 2.39 mg/mg Estimated.

**Chemical Oxygen Demand:** 1.76 mg/mg Estimated.

**Biological oxygen demand (BOD)**

Incubation Time	BOD
5 d	23 %
10 d	30 %
20 d	29 %

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

Hydrolysis, half-life, 0.025 Hour, pH 7

**Photodegradation**

**Test Type:** Half-life (indirect photolysis)

**Sensitization:** OH radicals

**Atmospheric half-life:** 0.088 d

**Method:** Estimated.

**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

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

**Biodegradability:** For similar material(s): This material rapidly hydrolyzes to products that are either readily or ultimately biodegradable.

10-day Window: Fail

**Biodegradation:** 0 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301A

**Quartz**

**Biodegradability:** Biodegradation is not applicable.

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

**Biodegradability:** For similar material(s): Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

For similar material(s): 10-day Window: Fail

**Biodegradation:** 3 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301F or Equivalent

**Bioaccumulative potential**

**Calcium carbonate treated with stearic acid**

**Bioaccumulation:** No relevant data found.

**Distillates (petroleum), hydrotreated middle**

**Bioaccumulation:** No relevant data found.

**Silicon dioxide**

**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

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

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

**Partition coefficient: n-octanol/water(log Pow):** 1.69 Estimated by Structure-Activity Relationship (SAR).

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

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

**Partition coefficient: n-octanol/water(log Pow):** < 3 estimated

**Vinyltri (methylethylketoxime) silane**

**Bioaccumulation:** No relevant data found.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

**Bioaccumulation:** For similar material(s): Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).

**Partition coefficient: n-octanol/water(log Pow):** 11.2

**Quartz**

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

**Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

**Bioaccumulation:** No relevant data found.

#### **Mobility in Soil**

##### **Calcium carbonate treated with stearic acid**

No relevant data found.

##### **Distillates (petroleum), hydrotreated middle**

No relevant data found.

##### **Silicon dioxide**

**Partition coefficient (Koc):** 21.73

##### **2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

No relevant data found.

##### **N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

**Partition coefficient (Koc):** > 5000 Estimated.

##### **Vinyltri (methylethylketoxime) silane**

No relevant data found.

##### **Methyltri(ethylmethylketoxime)silane isomers and oligomers**

No relevant data found.

##### **Quartz**

No relevant data found.

##### **Bis[(2-ethyl-2,5-dimethylhexanoyl)oxy](dimethyl)stannane**

No relevant data found.

#### **Results of PBT and vPvB assessment**

##### **Calcium carbonate treated with stearic acid**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

##### **Distillates (petroleum), hydrotreated middle**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

##### **Silicon dioxide**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

##### **2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

##### **N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Vinyltri (methylethylketoxime) silane**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Quartz**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Bis(2-ethyl-2,5-dimethylhexanoyl)oxy(dimethyl)stannane**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Other adverse effects**

**Calcium carbonate treated with stearic acid**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Distillates (petroleum), hydrotreated middle**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Silicon dioxide**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**2-Butanone, O,O',O''-(methylsilyldiyl)trioxime**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**N-(3-(Trimethoxysilyl) propyl)-1,2-ethanediamine**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Vinyltri (methylethylketoxime) silane**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Methyltri(ethylmethylketoxime)silane isomers and oligomers**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Quartz**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Bis(2-ethyl-2,5-dimethylhexanoyl)oxy(dimethyl)stannane**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

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## **SECTION 13: DISPOSAL CONSIDERATIONS**

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**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 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.

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## **SECTION 14: TRANSPORT INFORMATION**

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### **ADG**

Not regulated for transport

### **Classification for SEA transport (IMO-IMDG):**

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

Not regulated for transport  
Consult IMO regulations before transporting ocean bulk

### **Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

### **Hazchem Code**

None Allocated

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.

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## **SECTION 15: REGULATORY INFORMATION**

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### **Poison Schedule**

Not Scheduled

### **Australian Inventory of Industrial Chemicals (AIIC)**

All substances contained in this product are listed on the Australian Inventory of Industrial Chemicals, or are not required to be listed.

Prohibition/Licensing Requirements : Refer to model WHS Act and Regulations for prohibition, authorisation and restricted use.

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## **SECTION 16: ANY OTHER RELEVANT INFORMATION**

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### **Revision**

Identification Number: 4018244 / A142 / Issue Date: 30.11.2022 / Version: 5.0

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)
AU OEL	Australia. Workplace Exposure Standards for Airborne Contaminants.
Dow IHG	Dow Industrial Hygiene Guideline
STEL	Exposure standard - short term exposure limit
TWA	Time weighted average
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

### **Full text of other abbreviations**

AIIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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; IECS - 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No

Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

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