



# SAFETY DATA SHEET

## DOW SILICONES CORPORATION

**Product name:** DOWSIL™ 3-1965 Conformal Coating

**Issue Date:** 12/20/2024

**Print Date:** 12/21/2024

DOW SILICONES CORPORATION encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

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## 1. IDENTIFICATION

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**Product name:** DOWSIL™ 3-1965 Conformal Coating

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

**Identified uses:** Corrosion inhibitors Electrical industry and electronics

### COMPANY IDENTIFICATION

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

**Customer Information Number:**

800-258-2436  
SDSQuestion@dow.com

### EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:** 1 800 424 9300

**Local Emergency Contact:** 800-424-9300

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## 2. HAZARDS IDENTIFICATION

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### Hazard classification

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids - Category 2

Reproductive toxicity - Category 1B

### Label elements

#### Hazard pictograms



Signal word: **DANGER!****Hazards**

H225 Highly flammable liquid and vapour.  
 H360 May damage fertility or the unborn child.

**Precautionary statements****Prevention**

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.  
 P233 Keep container tightly closed.  
 P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical/ ventilating/ lighting equipment.  
 P242 Use only non-sparking tools.  
 P243 Take precautionary measures against static discharge.  
 P261 Avoid breathing spray.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves, protective clothing, eye protection and/or face protection.

**Response**

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P308 + P313 IF exposed or concerned: Get medical advice and/or attention.  
 P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

**Storage**

P403 + P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.

**Disposal**

P501 Dispose of contents and/or container to an approved waste disposal plant.

**Other hazards**

Static-accumulating flammable liquid.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**Chemical nature:** Silicone elastomer

This product is a mixture.

| Component                                 | CASRN      | Concentration      |
|---|------------|--------------------|
| Methyltrimethoxysilane                    | 1185-55-3  | >= 6.0 - <= 16.0 % |
| Octamethyltrisiloxane                     | 107-51-7   | >= 8.0 - <= 10.0 % |
| Diisopropoxydi(ethoxyacetoacetyl)titanate | 27858-32-8 | >= 0.6 - <= 2.7 %  |

|                         |           |                     |
|-------------------------|-----------|---------------------|
| Methanol                | 67-56-1   | >= 0.1 - <= 0.41 %  |
| Dimethyldimethoxysilane | 1112-39-6 | >= 0.05 - <= 0.19 % |

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## 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:** Wash off with plenty of water.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.

**Ingestion:** Rinse mouth with water. No emergency medical treatment necessary.

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

May damage fertility or the unborn child.

#### 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.

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## 5. FIREFIGHTING MEASURES

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### Extinguishing media

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

**Unsuitable extinguishing media:** High volume water jet. Do not use direct water stream..

### Special hazards arising from the substance or mixture

**Hazardous combustion products:** Silicon oxides. Formaldehyde. Carbon oxides. Metal oxides.

**Unusual Fire and Explosion Hazards:** Flash back possible over considerable distance.. Exposure to combustion products may be a hazard to health.. Flammable concentrations of vapor can accumulate at temperatures above flash point; see Section 9.. Flammable mixtures may exist within the vapor space of containers at room temperature.. Closed containers may rupture via pressure build-up when exposed to fire or extreme heat.. Fire burns more vigorously than would be expected.. Vapours may form explosive mixtures with air..

### 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 water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed.. Do not use a solid water stream as it may scatter and spread fire..

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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## **6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions, protective equipment and emergency procedures:** Remove all sources of ignition. Ventilate the area. Use personal protective equipment. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Ground and bond all containers and handling equipment. Vapor explosion hazard. Keep out of sewers. 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. Prevent spreading over a wide area (e.g. by containment or oil barriers). 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:** Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapours/mists with a water spray jet. Clean up remaining materials from spill with suitable absorbant. 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.

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## **7. HANDLING AND STORAGE**

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**Precautions for safe handling:** Do not get on skin or clothing. Do not breathe vapours or spray mist. Avoid contact with eyes. Do not swallow. Keep container tightly closed. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment. Non-sparking tools should be used. 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 evenafter container is emptied.

Use with local exhaust ventilation. Use only in an area equipped with explosion proof exhaust ventilation. Ensure all equipment is electrically grounded before beginning transfer operations. This material can accumulate static charge due to its inherent physical properties and can therefore cause an electrical ignition source to vapors. In order to prevent a fire hazard, as bonding and grounding may be insufficient to remove static electricity, it is necessary to provide an inert gas purge before beginning

transfer operations. Restrict flow velocity in order to reduce the accumulation of static electricity. Ground and bond container and receiving equipment.

**Conditions for safe storage:** Keep in properly labelled containers. Store locked up. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition.

Do not store with the following product types: Strong oxidizing agents. Organic peroxides. Flammable solids. Pyrophoric liquids. Pyrophoric solids. Self-heating substances and mixtures. Substances and mixtures, which in contact with water, emit flammable gases. Explosives. Gases. Unsuitable materials for containers: None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

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

| Component              | Regulation  | Type of listing | Value             |
|------------------------|---|-----------------|-------------------|
| Methyltrimethoxysilane | Dow IHG   | TWA             | 7.5 ppm           |
| Octamethyltrisiloxane  | Dow IHG   | TWA             | 20 ppm            |
| Methanol               | ACGIH   | TWA             | 200 ppm           |
|                        | Further information: Skin: Danger of cutaneous absorption       |                 |                   |
|                        | ACGIH   | STEL            | 250 ppm           |
|                        | Further information: Skin: Danger of cutaneous absorption       |                 |                   |
|                        | OSHA Z-1  | TWA             | 260 mg/m3 200 ppm |
| Isopropanol            | ACGIH   | TWA             | 200 ppm           |
|                        | Further information: A4: Not classifiable as a human carcinogen |                 |                   |
|                        | ACGIH   | STEL            | 400 ppm           |
|                        | Further information: A4: Not classifiable as a human carcinogen |                 |                   |
|                        | OSHA Z-1  | TWA             | 980 mg/m3 400 ppm |

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

### 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 |
| Isopropanol | 67-63-0 | Acetone            | Urine               | End of shift at end of workweek                          | 40 mg/l                   | ACGIH BEI |

### Exposure controls

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

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

#### Individual protection measures

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

#### Skin protection

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

**Other protection:** Wear clean, body-covering clothing.

**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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

|  |   |
|--|---|
| Physical state                         | liquid  |
| Color                                  | Straw-coloured  |
| Odor                                   | slight  |
| Odor Threshold                         | No data available   |
| pH                                     | Not applicable, substance/mixture is non-soluble (in water) |
| Melting point/ range                   | No data available   |
| Freezing point                         | No data available   |
| Boiling point (760 mmHg)               | > 100 °C (> 212 °F)   |
| Flash point                            | <b>Seta closed cup</b> 20 °C (68 °F)                        |
| Evaporation Rate (Butyl Acetate = 1)   | No data available   |
| Flammability (solid, gas)              | Not applicable  |
| Lower explosion limit                  | No data available   |
| Upper explosion limit                  | No data available   |
| Vapor Pressure                         | No data available   |
| Relative Vapor Density (air = 1)       | No data available   |
| Relative Density (water = 1)           | 0.99  |
| Water solubility                       | insoluble   |
| Partition coefficient: n-octanol/water | No data available   |

|                                  |  |
|----------------------------------|--|
| <b>Auto-ignition temperature</b> | No data available  |
| <b>Decomposition temperature</b> | No data available  |
| <b>Dynamic Viscosity</b>         | 150 mPa.s  |
| <b>Kinematic Viscosity</b>       | No data available  |
| <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 size</b>             | Not applicable   |

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

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## 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. Vapours may form explosive mixture with air. Highly flammable liquid and vapour.

**Conditions to avoid:** Avoid static discharge. Heat, flames and sparks.

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

**Hazardous decomposition products:**

Decomposition products can include and are not limited to: Formaldehyde. Methanol. Isopropanol.

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## 11. TOXICOLOGICAL INFORMATION

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

**Information on likely routes of exposure**

Inhalation, 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.

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:**

**Methyltrimethoxysilane**

LD50, Rat, male and female, 11,685 mg/kg

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.

**Octamethyltrisiloxane**

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

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

LD50, Rat, male, 23,020 mg/kg OECD 401 or equivalent

**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. Effects may be delayed. LD50, Rat, > 5,000 mg/kg

ALD - Approximate Lethal Dose, Humans, 340 mg/kg Estimated.

ALD - Approximate Lethal Dose, Humans, 29 - 237 ml Estimated.

**Dimethyldimethoxysilane**

LD50, Rat, > 2,000 - 5,000 mg/kg

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.

**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:**

**Methyltrimethoxysilane**

LD50, Rabbit, male and female, > 9,500 mg/kg OECD 402 or equivalent



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.

**Octamethyltrisiloxane**

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

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

For similar material(s): LD50, Rabbit, 12,870 mg/kg

**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. LD50, Rabbit, 15,800 mg/kg

**Dimethyldimethoxysilane**

The dermal LD50 has not been determined.

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.

**Acute inhalation toxicity**

**Information for the Product:**

No adverse effects are anticipated from single exposure to vapor. Vapor from heated material may cause respiratory irritation.

As product: The LC50 has not been determined.

**Information for components:**

**Methyltrimethoxysilane**

LC50, Rat, male and female, 6 Hour, vapour, > 7605 ppm 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.

**Octamethyltrisiloxane**

LC50, Rat, male and female, 4 Hour, vapour, > 22.6 mg/l No deaths occurred at this concentration.

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

For similar material(s): LC50, Rat, male and female, 4 Hour, vapour, > 198.65 mg/l No deaths occurred at this concentration.

**Methanol**

Easily attainable vapor concentrations may cause serious adverse effects, even death. At lower concentrations: May cause respiratory irritation and central nervous

system depression. Symptoms may include headache, dizziness and drowsiness, progressing to incoordination and unconsciousness. Inhalation of methanol may cause effects ranging from headache, narcosis and visual impairment to metabolic acidosis, blindness, and even death. Effects may be delayed.

LC50, Rat, 4 Hour, vapour, 3 mg/l

**Dimethyldimethoxysilane**

LC50, Rat, 4 Hour, vapour, > 4.7 mg/l

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.

**Skin corrosion/irritation**

Not classified based on available information.

**Information for the Product:**

Based on information for component(s):  
Brief contact is essentially nonirritating to skin.

**Information for components:**

**Methyltrimethoxysilane**

Brief contact may cause slight skin irritation with local redness.

**Octamethyltrisiloxane**

Brief contact is essentially nonirritating to skin.

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

For similar material(s):  
Brief contact is essentially nonirritating to skin.

**Methanol**

Prolonged contact may cause slight skin irritation with local redness.

**Dimethyldimethoxysilane**

Brief contact is essentially nonirritating to skin.

**Serious eye damage/eye irritation**

Not classified based on available information.

**Information for the Product:**

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

**Information for components:**

**Methyltrimethoxysilane**

May cause slight temporary eye irritation.  
Corneal injury is unlikely.

**Octamethyltrisiloxane**

May cause slight temporary eye irritation.  
Corneal injury is unlikely.

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

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

**Methanol**

May cause eye irritation.

**Dimethyldimethoxysilane**

Essentially nonirritating to eyes.

**Sensitization**

**For skin sensitization:**

Not classified based on available information.

**For respiratory sensitization:**

Not classified based on available information.

**Information for the Product:**

For skin sensitization:

Contains component(s) which did not cause allergic skin sensitization in guinea pigs.

For respiratory sensitization:

No relevant data found.

**Information for components:**

**Methyltrimethoxysilane**

For skin sensitization:

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

**Octamethyltrisiloxane**

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

For respiratory sensitization:

No relevant data found.

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

For similar material(s):

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

**Methanol**

For skin sensitization:  
No relevant data found.

For respiratory sensitization:  
No relevant data found.

**Dimethyldimethoxysilane**

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

For respiratory sensitization:  
No relevant data found.

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

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Methyltrimethoxysilane**

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

**Octamethyltrisiloxane**

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

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

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

**Methanol**

Causes damage to organs.  
Target Organs: Eyes, Central nervous system

**Dimethyldimethoxysilane**

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

**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:**

**Methyltrimethoxysilane**

Material is not classified as an aspiration hazard based on insufficient data, however materials with low viscosity may be aspirated into the lungs during ingestion or vomiting.

**Octamethyltrisiloxane**

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

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

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

**Methanol**

May be harmful if swallowed and enters airways.

**Dimethyldimethoxysilane**

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:**

**Methyltrimethoxysilane**

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

**Octamethyltrisiloxane**

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

Liver

This material contains octamethyltrisiloxane (L3). Repeated inhalation exposure in rats to L3 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

For similar material(s):

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

**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.

**Dimethyldimethoxysilane**

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

Liver

Male reproductive organs.

This material contains dimethyldimethoxysilane. Repeated exposure in rats to dimethyldimethoxysilane resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

### **Carcinogenicity**

Not classified based on available information.

#### **Information for the Product:**

Product test data not available.

#### **Information for components:**

##### **Methyltrimethoxysilane**

No relevant data found.

##### **Octamethyltrisiloxane**

Did not cause cancer in laboratory animals.

##### **Diisopropoxydi(ethoxyacetoacetyl)titanate**

No relevant data found.

##### **Methanol**

Did not cause cancer in laboratory animals.

##### **Dimethyldimethoxysilane**

No relevant data found.

### **Teratogenicity**

May damage fertility or the unborn child.

#### **Information for the Product:**

Product test data not available.

#### **Information for components:**

##### **Methyltrimethoxysilane**

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

##### **Octamethyltrisiloxane**

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

##### **Diisopropoxydi(ethoxyacetoacetyl)titanate**

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.

##### **Methanol**

Methanol has caused birth defects in mice at doses nontoxic to the mother as well as slight behavioral effects in offspring of rats.

**Dimethyldimethoxysilane**

Has caused birth defects in laboratory animals.

**Reproductive toxicity**

May damage fertility or the unborn child.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Methyltrimethoxysilane**

In animal studies, did not interfere with reproduction.

**Octamethyltrisiloxane**

In animal studies, did not interfere with fertility. In animal studies, did not interfere with reproduction.

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

No relevant data found.

**Methanol**

In animal studies, did not interfere with reproduction.

**Dimethyldimethoxysilane**

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

**Mutagenicity**

Not classified based on available information.

**Information for the Product:**

Product test data not available.

**Information for components:**

**Methyltrimethoxysilane**

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

**Octamethyltrisiloxane**

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

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

In vitro genetic toxicity studies were negative.

**Methanol**

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

**Dimethyldimethoxysilane**

In vitro genetic toxicity studies were negative.

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**12. ECOLOGICAL INFORMATION**

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

**Toxicity****Methyltrimethoxysilane****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), flow-through, 96 Hour, > 110 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna (Water flea), flow-through test, 48 Hour, > 122 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

No toxicity at the limit of solubility  
ErC50, Pseudokirchneriella subcapitata (green algae), Static, 72 Hour, Growth rate inhibition, > 3.6 mg/l, OECD Test Guideline 201  
No toxicity at the limit of solubility  
NOEC, Pseudokirchneriella subcapitata (green algae), Static, 72 Hour, Growth rate inhibition, >= 3.6 mg/l, OECD Test Guideline 201

**Toxicity to bacteria**

EC10, activated sludge, Static, 3 Hour, Respiration rates., > 100 mg/l, OECD Test Guideline 209

**Chronic toxicity to aquatic invertebrates**

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, >= 10 mg/l

**Octamethyltrisiloxane****Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.  
No toxicity at the limit of solubility  
LC50, Oncorhynchus mykiss (rainbow trout), flow-through test, 96 Hour, > 0.0191 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

No toxicity at the limit of solubility  
EC50, Daphnia magna (Water flea), flow-through test, 48 Hour, > 0.02 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

No toxicity at the limit of solubility  
EC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Growth rate inhibition, > 0.0094 mg/l, OECD Test Guideline 201



**Toxicity to bacteria**

For similar material(s):

EC50, activated sludge, static test, 3 Hour, Respiration rates., > 100 mg/l, OECD Test Guideline 209

**Chronic toxicity to fish**

No toxicity at the limit of solubility

NOEC, Oncorhynchus mykiss (rainbow trout), 90 d, > 0.027 mg/l

**Chronic toxicity to aquatic invertebrates**

No toxicity at the limit of solubility

NOEC, Daphnia magna (Water flea), flow-through test, 21 d, > 0.015 mg/l

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

**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, Rasbora heteromorpha (Harlequin fish), static test, 96 Hour, 4,200 mg/l

**Acute toxicity to aquatic invertebrates**

LC50, Daphnia magna (Water flea), static test, 48 Hour, > 100 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

ErC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Growth rate inhibition, > 100 mg/l, OECD Test Guideline 201 or Equivalent

NOEC, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Growth rate inhibition, 100 mg/l, OECD Test Guideline 201 or Equivalent

**Methanol**

**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, Bluegill sunfish (Lepomis macrochirus), flow-through test, 96 Hour, 15,400 mg/l

**Acute toxicity to aquatic invertebrates**

LC50, Daphnia magna (Water flea), 48 Hour, > 10,000 mg/l

**Acute toxicity to algae/aquatic plants**

ErC50, Pseudokirchneriella subcapitata (green algae), 96 Hour, Growth rate, 22,000 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**

IC50, activated sludge, 3 Hour, Respiration rates., > 1,000 mg/l, OECD Test Guideline 209

**Chronic toxicity to fish**

NOEC, Oryzias latipes (Orange-red killifish), 200 Hour, 15,800 mg/l

**Dimethyldimethoxysilane**

**Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Based on data from similar materials

LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, > 126 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna (Water flea), 48 Hour, > 119 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

Based on data from similar materials

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, > 118 mg/l, OECD Test Guideline 201

**Toxicity to bacteria**

Based on data from similar materials

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

**Persistence and degradability**

**Methyltrimethoxysilane**

**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.

**Biodegradation:** 54 %

**Exposure time:** 28 d

**Method:** Regulation (EC) No. 440/2008, Annex, C.4-A

**Octamethyltrisiloxane**

**Biodegradability:** Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or BOD28/ThOD < 2.5%).

10-day Window: Not applicable

**Biodegradation:** 0 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 310 or Equivalent

**Photodegradation**

**Atmospheric half-life:** 8.94 d

**Method:** Estimated.

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

**Biodegradability:** For similar material(s): Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

10-day Window: Pass

**Biodegradation:** 66 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301D

**Methanol**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

**Theoretical Oxygen Demand:** 1.50 mg/mg

**Chemical Oxygen Demand:** 1.49 mg/mg Dichromate

**Biological oxygen demand (BOD)**

| Incubation Time | BOD  |
|-----------------|------|
| 5 d             | 72 % |
| 20 d            | 79 % |

**Photodegradation****Test Type:** Half-life (indirect photolysis)**Sensitization:** OH radicals**Atmospheric half-life:** 8 - 18 d**Method:** Estimated.**Dimethyldimethoxysilane****Biodegradability:** For similar material(s): Material is not readily biodegradable according to OECD/EEC guidelines.

10-day Window: Fail

**Biodegradation:** 0 %**Exposure time:** 28 d**Stability in Water (1/2-life)**

Hydrolysis, DT50, &lt; 0.6 Hour, pH 7

**Bioaccumulative potential****Methyltrimethoxysilane****Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).**Partition coefficient: n-octanol/water(log Pow):** -0.82 Estimated.**Octamethyltrisiloxane****Bioaccumulation:** Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).**Partition coefficient: n-octanol/water(log Pow):** 5.35 Estimated.**Bioconcentration factor (BCF):** >= 500 Pimephales promelas (fathead minnow) OECD Test Guideline 305**Diisopropoxydi(ethoxyacetoacetyl)titanate****Bioaccumulation:** For similar material(s): Bioconcentration potential is low (BCF < 100 or Log Pow < 3).**Partition coefficient: n-octanol/water(log Pow):** 0.05**Bioconcentration factor (BCF):** 3 Fish Estimated.**Methanol****Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).**Partition coefficient: n-octanol/water(log Pow):** -0.77 Measured**Bioconcentration factor (BCF):** < 10 Leuciscus idus (Golden orfe) Measured**Dimethyldimethoxysilane****Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).**Partition coefficient: n-octanol/water(log Pow):** Pow: 2 estimated**Bioconcentration factor (BCF):** 3.16 Estimated.**Mobility in soil****Methyltrimethoxysilane**

No relevant data found.

**Octamethyltrisiloxane**

**Partition coefficient (Koc):** 3179 Estimated.

**Diisopropoxydi(ethoxyacetoacetyl)titanate**

For similar material(s):

**Partition coefficient (Koc):** 1.53 Estimated.

**Methanol**

**Partition coefficient (Koc):** 0.44 Estimated.

**Dimethyldimethoxysilane**

**Partition coefficient (Koc):** 168.6 Estimated.

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## 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 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 SDS SECTION 1: Identified Uses. 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 of the waste generator. Do not re-use containers for any purpose.

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## 14. TRANSPORT INFORMATION

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**DOT**

|                             |  |
|-----------------------------|--|
| <b>Proper shipping name</b> | Flammable liquids, n.o.s.(Methyltrimethoxysilane, Octamethyltrisiloxane) |
| <b>UN number</b>            | UN 1993  |
| <b>Class</b>                | 3  |
| <b>Packing group</b>        | II   |

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

|                             |   |
|-----------------------------|---|
| <b>Proper shipping name</b> | FLAMMABLE LIQUID, N.O.S.(Methyltrimethoxysilane, Octamethyltrisiloxane) |
| <b>UN number</b>            | UN 1993   |

|   |  |
|---|--|
| <b>Class</b>  | 3  |
| <b>Packing group</b>  | II   |
| <b>Marine pollutant</b>   | No   |
| <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):**

|                             |  |
|-----------------------------|--|
| <b>Proper shipping name</b> | Flammable liquid, n.o.s. (Methyltrimethoxysilane, Octamethyltrisiloxane) |
| <b>UN number</b>            | UN 1993  |
| <b>Class</b>                | 3  |
| <b>Packing group</b>        | II   |

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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## 15. REGULATORY INFORMATION

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

Flammable (gases, aerosols, liquids, or solids)  
 Hazard not otherwise classified (physical hazards)  
 Reproductive toxicity

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### Pennsylvania Right To Know

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

| <b>Components</b>                                 | <b>CASRN</b>  |
|---|---------------|
| Dimethyl siloxane, trimethoxysilyl-terminated     | Not available |
| Methyltrimethoxysilane                            | 1185-55-3     |
| Dimethyl Siloxane, Dimethylvinylsiloxy-terminated | 68083-19-2    |
| Octamethyltrisiloxane                             | 107-51-7      |

### California Prop. 65

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

#### United States TSCA Inventory (TSCA)

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

## 16. OTHER INFORMATION

### Hazard Rating System

#### NFPA

| Health | Flammability | Instability |
|--------|--------------|-------------|
| 2      | 3            | 0           |

#### HMIS

| Health | Flammability | Physical Hazard |
|--------|--------------|-----------------|
| 0*     | 3            | 0               |

\* = Chronic Effects (See Hazards Identification)

### Revision

Identification Number: 4006079 / A713 / Issue Date: 12/20/2024 / Version: 11.0

In case this version of the SDS contains significant changes from the previous version, they are listed below or noted by bold, double bars in the left-hand margin throughout this document.

Changes encompass identification, hazards, tox/eco-tox information and the addition/removal of the ingredients, and regulatory information, hazard information, uses, risk management measures and other key regulatory changes of the product. Detailed explanation of the changes can be obtained upon request.

### Legend

|           |  |
|-----------|--|
| ACGIH     | USA. ACGIH Threshold Limit Values (TLV)  |
| ACGIH BEI | ACGIH - Biological Exposure Indices (BEI)  |
| Dow IHG   | Dow Industrial Hygiene Guideline   |
| OSHA Z-1  | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| STEL      | Short-term exposure limit  |
| TWA       | Time weighted average  |

### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half

maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECL - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Information Source and References**

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

DOW SILICONES CORPORATION urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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