

- **Product Identifier**
  - **Trade Name:** Duralectric Adhesive 779-005
  - **Application of the Substance or Mixture:** Silicone Sealant
- **Details of the Supplier of the Safety Data Sheet (SDS)**
  - **Manufacturer or Supplier:**
    - Glenair, Inc.
    - 1211 Air Way
    - Glendale, CA 91201
    - 818-247-6000
    - www.glenair.com
  - **Emergency Telephone Number:**
    - North America - Chemtrec: 1-800-424-9300 (24 hours)
    - International - Chemtrec: 01-703-527-3887 (24 hours)

## 2 Hazard(s) identification

- **Hazard Classification**  
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
- **Label Elements**
  - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Pictogram(s)**



GHS08

- **Signal Word** Warning
- **Hazard statements**  
H361 Suspected of damaging fertility or the unborn child.
- **Precautionary statements**  
Wear protective gloves/protective clothing/eye protection/face protection.  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
IF exposed or concerned: Get medical advice/attention.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Hazard Rating System**
  - **NFPA System**
    - **NFPA Ratings (scale 0 - 4)**



Health = 0  
Fire = 1  
Reactivity = 0

NFPA special hazards (water reactivity and oxidizing property): None

- **HMIS System**
    - **HMIS Ratings (scale 0 - 4)**
- |            |   |
|------------|---|
| HEALTH     | 0 |
| FIRE       | 1 |
| REACTIVITY | 0 |
- Health = 0  
Fire = 1  
Reactivity = 0

- **Other hazards**
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical Characterization: Mixtures**

### · Composition/Information on Ingredients

CAS: 1185-55-3 EINECS: 214-685-0 RTECS: VV 4650000	Trimethoxy(methyl)silane	Flam. Liq. 2, H225 Skin Sens. 1, H317	5-<10%
CAS: 556-67-2 EINECS: 209-136-7 Index Number: 014-018-00-1 RTECS: GZ 4397000	Octamethylcyclotetrasiloxane	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 4, H413	0.1-1%
CAS: 67-56-1 EINECS: 200-659-6 Index Number: 603-001-00-X RTECS: PC 1400000	Methanol	Flam. Liq. 2, H225 Acute Tox. 3, H301; Acute Tox. 3, H331 STOT SE 1, H370	0.1-1%

### · Classification System:

The Classifications were based on the Toxicological and Ecological Data of the substances/mixtures in the Section 11 and 12.

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- **Additional Information:**  
If the chemical name/CAS number is proprietary and or weight percentage is listed as a range, the specific chemical identity and or percentage of composition has been withheld as a trade secret.

## 4 First-aid measures

- **Description of First Aid Measures**
- **General Information**  
Ensure medical personnel are aware of exposure and take precautions for their personal protection; see Section 8 for the information of personal protection.
- **After Inhalation**  
Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person is not breathing.  
Consult a doctor if symptoms persist.  
Supply fresh air; consult doctor in case of complaints.
- **After Skin Contact**  
Gently wash contaminated skin with water.  
Remove all contaminated clothing and wash before reuse.  
Get medical attention
- **After Eye Contact**  
Rinse opened eyes under running water for at least 15 minutes.  
Remove contact lenses if present and easy to do so; continue rinsing.  
Seek medical treatment in case of complaints.
- **After Swallowing**  
If victim is unconscious; never give anything by mouth.  
Do NOT induce vomiting.  
If victim is conscious, rinse out mouth with water.  
Get medical attention
- **After Exposure** Seek medical treatment in case of complaints.
- **Information for Doctor** Have chemical containers, labels and/or (M)SDS ready when calling or visiting a medical center.
  - **Indication of any Immediate Medical Attention and Special Treatment Needed**  
Reproductive system function tests  
Check section 11 Toxicological Information for further relevant information.
- **Additional Information**  
For additional information, please consult the corresponding first aid measures in the most current version of Emergency Response Guidebook which is produced by the US Department of Transportation.

## 5 Fire-fighting measures

- **Extinguishing Media**
- **Suitable Extinguishing Agent(s)**  
Use fire fighting measures and extinguishing agents that suit the environment.  
In case of fire, suitable extinguishing agents are:  
Alcohol resistant foam.  
Dry chemical or fire-extinguishing powder.  
Carbon dioxide (CO<sub>2</sub>).  
Water spray or water fog.
- **Unsuitable Extinguishing Agent(s)** No relevant information.
- **Firefighting Procedures**  
Isolate fire and deny unnecessary entry.  
Eliminate all ignition sources if safe to do so.  
Do not extinguish fire unless flow can be stopped.  
Burning liquids may be moved by flushing with water; protect personnel and minimize property damage.  
Fight fire from protected location or safe distance.  
Contain fire water runoff if possible to prevent environmental pollution.
- **Special Hazards Arising in Fire**  
Will not burn unless preheated.  
In case of fire, following can be released:  
Carbon dioxide (CO<sub>2</sub>) and Carbon monoxide (CO)  
Formaldehyde, a skin and lung sensitizer and a regulated carcinogen, may be formed during fires.  
Nitrogen oxides  
Silicon oxide (SiO<sub>2</sub>)
- **Advice for Firefighters**  
If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910.156).  
As with any fire, wear positive-pressure self-contained breathing apparatus and full protective gear that are NIOSH approved.
- **Additional Information** Ensure adequate and functional fire fighting facilities equipped in working area at all times.

## 6 Accidental release measures

- **Personal Precautions**  
Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during use.  
Ensure personnel take precautions for their personal protection during clean up; see Section 8 for the specific requirements.
- **Environmental Precautions** No further relevant information.
- **Cleaning Up Methods**  
Ensure adequate ventilation.

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- Eliminate all ignition sources.  
 Keep unauthorized personnel away.  
 For large spills:  
 Shut off source of leak if safe to do so.  
 Dike and contain.  
 Remove with vacuum trucks or pump to storage/salvage vessels.  
 Absorb residues with liquid-binding materials.  
 For small spills:  
 Ventilate and wash area after clean-up is complete.  
 Collect spills in suitable and properly labeled containers.  
 Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.  
 Dispose contaminated chemicals as waste according to Section 13.
- **Additional Information** No further relevant information.

### 7 Handling and storage

- **Handling**
- **Precautions for Safe Handling**  
 Keep away from incompatible material(s).  
 Avoid any release into the environment.  
 For industrial or professional use only  
 Observe all the personal protection requirements in Section 8.
  - **Information about Protection Against Explosions and Fires**  
 Will not burn unless preheated.  
 Keep away from heat, sparks, open flame and other ignition sources during handling.  
 Be prepared with respirators.
- **Storage**
- **Requirements to be Met by Storerooms and Receptacles**  
 Store in a well-ventilated place; provide ventilation for receptacles.  
 Keep stored in accordance with local, regional, national, and international regulations.
  - **Information about Storage in One Common Storage Facility**  
 Store away from incompatible material(s).  
 Store away from foodstuffs.  
 Avoid release to the environment.
- **Additional Information** No further relevant information.

### 8 Exposure controls/personal protection

- **Engineering Measures or Controls**
- **Exposure Limit Values that Require Monitoring at the Workplace**  
 The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
 At this time, the remaining constituent has no known exposure limits.

#### 556-67-2 Octamethylcyclotetrasiloxane

WEEL	Long-term value: 10* ppm *OARS WEEL
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#### 67-56-1 Methanol

PEL	Long-term value: 260 mg/m <sup>3</sup> , 200 ppm
REL	Short-term value: 325 mg/m <sup>3</sup> , 250 ppm Long-term value: 260 mg/m <sup>3</sup> , 200 ppm
TLV	Short-term value: 328 mg/m <sup>3</sup> , 250 ppm Long-term value: 262 mg/m <sup>3</sup> , 200 ppm Skin; BEI

- **Other Engineering Measures or Controls**  
 Ventilation rates should be matched to conditions.  
 If applicable, use process enclosure(s), local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.
- **Personal Protective**
- **General Protective and Hygienic Measures**  
 Do not eat, drink or smoke during work.  
 Clean hands and exposed skin thoroughly after work and before breaks.
- **Personal Protective Equipment (PPE)**
- **Breathing Equipment**  
 Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits.  
 Use a NIOSH approved air-purifying organic vapor respirator if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air supplied respirator.  
 Observe OSHA regulations (29CFR 1910.134) for respirator use.
- **Hand Protection**  
 Selection of glove material should take into consideration the penetration times, rates of diffusion, and the degradation.  
 Suggested glove type(s):  
 Nitrile Gloves  
 Butyl Rubber Gloves
- **Eye Protection** safety glasses
- **Body Protection** Impermeable protective clothing.

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## Additional Information

All protective clothing (suits, gloves, footwear, headgear) should be clean, available every day, and put on before work. The Engineering measures or controls, and PPE recommendations are only guidelines and may not apply to every situation. For additional information, please consult the corresponding requirements under OSHA 29 CFR 1910.94-95, and 29 CFR 1910.132-138.

## 9 Physical and chemical properties

### Information on Basic Physical and Chemical Properties

- **Appearance:**
- **Form:** Paste
- **Color:** White
- **Odor:** Slight
- **Odor Threshold:** Not determined.

- **PH-Value:** Not determined.

### Change in Condition:

- **Melting Point:** Not determined.
- **Boiling Point:** Not determined.
- **Flash Point:** >200 °C (>392 °F)
- **Decomposition Temperature:** Not determined.
- **Flammability:** Not determined.
- **Explosion:** Not determined.
- **Explosion Limits:**
- **Lower:** Not determined.
- **Upper:** Not determined.

- **Vapor Pressure:** Not determined.
- **Vapor Density:** not determined
- **Density at 20 °C (68 °F):** 1.12 g/cm<sup>3</sup> (9.346 lbs/gal)
- **Solubility in or Miscibility with**
- **Water:** Not miscible or difficult to mix.
- **Viscosity:**
- **Dynamic:** Not determined.
- **Kinematic:** Not determined.

- **Additional Information** No further relevant information.

## 10 Stability and reactivity

- **Physical Hazard(s)** Not a regulated reactive or physical hazard under GHS.
- **Hazardous Reactivity and Chemical Stability** Stable under normal conditions of use, storage and temperatures.
- **Thermal Decomposition and Conditions to be Avoided**  
Keep away from incompatible material(s).  
Thermally decomposes during fire or high heat; keep away from heat, sparks, open flame and other ignition sources.
- **Possibility of Other Hazardous Reaction(s)** No further relevant information available.
- **Incompatible Material(s)**  
Water  
Oxidizing agents
- **Hazardous Decomposition Product(s)**  
contact with water or humid air can cause methanol to form.  
Thermally decomposes during fire or very high heat. See Section 5 for fire hazards evolved during thermal decomposition.
- **Hazardous Polymerization Product(s)** No relevant information.
- **Additional Information** No further relevant information.

## 11 Toxicological information

### Acute Toxicity

#### Oral

#### 70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated

Oral LD50 > 15400 mg/kg (rat)  
Reference: ACToR (2011).

#### 68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica

Oral LD50 (No data available)

#### 1185-55-3 Trimethoxy(methyl)silane

Oral LD50 11685 mg/kg (rat)  
Most deaths occurred within the first several hours after dosing; however, the dose level was outside of the guidance value ranges.  
Reference: ECHA (2011).

#### 67-56-1 Methanol

Oral LD50 5628 mg/kg (rat)

- **Potential Health Effect(s):** See acute inhalative effect(s) for further information

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**· Dermal****70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Derma	LD50	(rabbit) (> 2000 mg/kg) > 16 mL/kg (rabbit) Reference: ACToR (2011).
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**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Derma	LD50	(No data available)
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**1185-55-3 Trimethoxy(methyl)silane**

Derma	LD50	> 9500 mg/kg (rabbit) (OECD TG 402) No mortality was reported; the substance was not classified as an acute dermal hazard. Reference: ECHA (2011).
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**67-56-1 Methanol**

Derma	LD50	15800 mg/kg (rabbit)
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**· Potential Health Effect(s):**

No further relevant information available; classification is not possible.  
See acute inhalative effect(s) for further information.

**· Inhalative****70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Inhalative	LC50/4 h	(rat) (LC50/7 hours > 8.75 mg/l) No changes were found in lung, thorax, or respiratory system. Reference: ACToR (2011).
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**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Inhalative	LC50/4 h	(No data available)
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**1185-55-3 Trimethoxy(methyl)silane**

Inhalative	LC50/4 h	> 42.1 mg/l (rat) (LC0/6 hr; translated from 7605 ppm; OECD TG 403) No mortality was reported; the substance was not classified as an acute inhalative hazard. Reference: ECHA (2011).
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**67-56-1 Methanol**

Inhalative	LC50/4 h	128.2 mg/l (rat) Source: Sigma Aldrich SDS 2015
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**· Potential Health Effect(s):**

While not possible to classify the acute inhalative hazard due to missing data, the product may cause the following symptom(s):

**· Skin Corrosion or Irritation****70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Corrosion/Irritation	irritating (Human) Transient conjunctival irritation were observed in rabbits and humans within 24-48 hours after exposure. No more details were available; the substance was classified as a dermal irritant (Category 2) for safety reason. Reference: HSNO CCID (2011).
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**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Corrosion/Irritation	(No data available)
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**1185-55-3 Trimethoxy(methyl)silane**

Corrosion/Irritation	not irritating (rabbit) (OECD TG 404; 0.5mL neat substance; 14-day) Erythema: 0.11/4 (max. 4; time point: 24/48/72 hours; mean score of all treated animals); fully reversible within 14 days. Edema: 0/4 (max. 4). The substance was not classified as irritating to rabbit skin. Reference: ECHA (2011).
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**67-56-1 Methanol**

Corrosion/Irritation	no irritation (rabbit) Source: Sigma Aldrich SDS 2015
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**· Potential Health Effect(s):** No further relevant information; classification is not possible.

**· Eye Serious Damage or Irritation****70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Damage/Irritation	(No data available)
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**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Damage/Irritation	(No data available)
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**1185-55-3 Trimethoxy(methyl)silane**

Damage/Irritation	not irritating (rabbit) (OECD TG 405; 0.1mL neat substance) Cornea, iris, conjunctivae, and chemosis: 0 (time point: 24/48/72 hours). The substance was not irritating to rabbit eyes. Reference: ECHA (2011).
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**67-56-1 Methanol**

Damage/Irritation	no irritation (rabbit) Source: Sigma Aldrich SDS 2015
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**· Potential Health Effect(s):** No further relevant information; classification is not possible.

**· Respiratory or Skin Sensitization****70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Sensitization	Skin	(No data available)
	Respiratory	(No data available)

**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Sensitization	Skin	(No data available)
	Respiratory	(No data available)

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**1185-55-3 Trimethoxy(methyl)silane**

Sensitization	Skin	sensitizing (guinea pig) (OECD TG 406; epicutaneous and occlusive) 7 out of ten treated animals showed positive reactions with a 5% concentration of the substance; no positive reactions were observed in negative controlled groups. The substance was therefore classified as a dermal sensitizer. Reference: ECHA (2011).
	Respiratory	(No data available)

**67-56-1 Methanol**

Sensitization	Skin	not sensitizing (guinea pig) (OECD Guideline 406 Maximisation test) Source: Sigma Aldrich SDS 2015
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· **Potential Health Effect(s):** No relevant information for respiratory sensitization; classification is not possible.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Germ Cell Mutagenicity**

**70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Mutagenicity (No data available)

**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Mutagenicity (No data available)

**1185-55-3 Trimethoxy(methyl)silane**

Mutagenicity	(Test species listed below) In Vitro (bacterial reverse mutation assay; OECD TG 471; Salmonella typhimurium: TA-1535, TA-1537, TA-98 and TA-100; Escherichia coli: WP2 uvrA) - negative with and without metabolic activation. In Vitro (mammalian chromosome aberration test; OECD TG 473; Chinese hamster ovary (CHO-K1) cells) - positive with, but negative without metabolic activation. In Vitro (mammalian cell gene mutation assay; OECD TG 476; mouse lymphoma L5178Y cells) - positive with, but equivocal without metabolic activation. In Vivo (micronucleus assay; OECD TG 474; mouse; oral with up to 2000 mg/kg of the substance) - test substance was negative for the induction of micronuclei under the conditions of the test. When considering all of the evidence, the substance was not classified as a mutagen. Reference: ECHA (2011).
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**67-56-1 Methanol**

Mutagenicity	negative (salmonella typhimurium) (AMES TEST) Genotoxicity in vitro - Ames Test negative with and without metabolic activation. Source: Sigma Aldrich SDS 2015
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· **Potential Health Effect(s):** No further relevant information; classification is not possible.

· **Carcinogenicity**

**70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Carcinogenicity	negative (Test species: n/a) Not listed as a carcinogen according to ACGIH, IARC, NTP, or OSHA.
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**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Carcinogenicity (No data available)

**1185-55-3 Trimethoxy(methyl)silane**

Carcinogenicity	negative (Test species: n/a) Not listed as a carcinogen according to ACGIH, IARC, NTP, or OSHA.
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**67-56-1 Methanol**

Carcinogenicity (No data available for the product itself)

· **Potential Health Effect(s):** Not a known Carcinogen.

· **Reproductive Toxicity**

**70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Reproductive Toxi. (No data available)

**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Reproductive Toxi. (No data available)

**1185-55-3 Trimethoxy(methyl)silane**

Reproductive Toxi.	(rat) NOAEL (OECD TG 422; oral; maternal, reproductive, and teratogenicity toxicity) = 1000 mg/kg/day (maximum dose tested); thus, exposure to the substance was not associated with any reproductive toxicities. Reference: ECHA (2011).
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· **Potential Health Effect(s):** Suspected of damaging fertility or the unborn child.

· **Specific Target Organ Toxicity - Single Exposure**

**70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

STOT-Single	(rat) Target organ: None After an oral administration with 15400 mg/kg of the substance, eye ptosis, somnolence and an increase of mean urine volume were observed in the treated rats. However, the dose level was outside of the guidance value ranges. Reference: ACToR (2011).
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**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

STOT-Single (No data available)

**1185-55-3 Trimethoxy(methyl)silane**

STOT-Single (No data available)

· **Potential Health Effect(s):** No further relevant information; classification is not possible.

· **Specific Target Organ Toxicity - Repeated Exposure**

**70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

STOT-Repeated (No data available)

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**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

STOT-Repeated (No data available)

**1185-55-3 Trimethoxy(methyl)silane**

STOT-Repeated Target: None (rat)  
 -NOAEL (OECD TG 422; oral with up to 1000 mg/kg bw/day) = 50 mg/kg bw/day  
 Repeated digestion of the substance was associated with organ weight and/or histomorphological changes in males (liver, thymus, thyroid, duodenum, jejunum, and red blood cell) and females (liver, thyroid, duodenum, jejunum, and adrenal gland) at dose levels at or above 250 mg/kg bw/day.  
 -NOAEL (OECD TG 413; inhalation: vapor; whole-body exposure for 90 days; up to 8.9 mg/L) = 0.56 mg/l. Repeated exposure to the substance was associated with increased incidence of grossly urinary bladder calculi along with kidney dilation at or above 400 ppm (2.2 mg/L).  
 However, the dose levels were both outside of the guidance value ranges; the substance was not classified as a hazard to target organs.  
 Reference: ECHA (2011).

**Aspiration Hazard****70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Aspiration Hazard (No data available)

**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Aspiration Hazard (No data available)

**1185-55-3 Trimethoxy(methyl)silane**

Aspiration Hazard (No data available)

**Potential Health Effect(s):** No relevant information; classification is not possible.

**Additional Information** No further relevant information.

**12 Ecological information****Aquatic Environmental Toxicity****70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Algae Toxicity (No data available)

Crustacean Toxicity (No data available)

Fish Toxicity (No data available)

**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Algae Toxicity (No data available)

Crustacean Toxicity (No data available)

Fish Toxicity (No data available)

**1185-55-3 Trimethoxy(methyl)silane**

Algae Toxicity &gt; 120 mg/l (Scenedesmus subspicatus) (EC50 (72 h; Growth rate), OECD TG 201)

Crustacean Toxicity &gt; 122 mg/l (Daphnia magna (water flea)) (EC50 (48 hrs), OECD TG 202)

Fish Toxicity &gt; 110 mg/l (Oncorhynchus mykiss (Rainbow trout)) (LC50 (96 hrs), OECD TG 203)

The substance is therefore not classified as hazardous to aquatic organisms based on the classification criteria.  
 Reference: ECHA (2011).

**67-56-1 Methanol**

Algae Toxicity 22000 mg/l (Test species listed below)

Scenedesmus capricornutum

Source: Sigma Aldrich SDS 2015

Fish Toxicity 15400 mg/l (Lepomis macrochirus (Bluegill))

Source: Sigma Aldrich SDS 2015

**Aquatic Environmental Toxicity Assessment:** No further relevant information; classification is not possible.

**Degradability and Stability****70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated**

Biodegradation (No data available)

Persistence (Test species: n/a)

The substance is not persistent.

Reference: Canada DSL (2007).

Photodegradation (No data available)

Stability in water (No data available)

**68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica**

Biodegradation (No data available)

Persistence (No data available)

Photodegradation (No data available)

Stability in water (No data available)

**1185-55-3 Trimethoxy(methyl)silane**

Biodegradation (Test species: n/a) (EU Method C.4-A)

Biodegradation (28 days) = 54%; the substance is not readily biodegradable.

Reference: ECHA (2011).

Persistence (Test species: n/a)

The substance is persistent.

Reference: Canada DSL (2007).

Photodegradation (No data available)

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Stability in water (Test species: n/a)  
 Half-life (PH=4; 25 °C) < 0.033 h  
 Half-life (PH=7; 25 °C) = 2.2 h  
 Half-life (PH=9; 25 °C) = 0.11 h  
 The substance is hydrolytically unstable in water.  
 Reference: ECHA (2011).

### Bioaccumulation and Distribution

#### 70131-67-8 Siloxanes and Silicones, di-Me, hydroxy-terminated

LogPow (No data available)  
 BCF (Test species: n/a)  
 The substance is not bioaccumulative.  
 Reference: Canada DSL (2007).

Koc (No data available)

#### 68909-20-6 Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica

LogPow (No data available)  
 BCF (No data available)  
 Koc (No data available)

#### 1185-55-3 Trimethoxy(methyl)silane

LogPow -2.36 (Test species: n/a)  
 Reference: ECHA (2011).  
 BCF (No data available)  
 The substance is not or low bioaccumulative.  
 Reference: Canada DSL (2007).  
 Koc (No data available)

· **Degradability and Bioaccumulation Assessment:** Non-rapidly degradable, and low bioaccumulative.

· **Additional Information** No further relevant information.

## 13 Disposal considerations

### Hazardous Waste List

· **Description:** It may be necessary to contain and dispose of the substance/mixture as a hazardous waste.

### RCRA Waste:

1185-55-3	Trimethoxy(methyl)silane	D001	5-<10%
67-56-1	Methanol	U154	0.1-1%

### Waste Treatment Recommendation:

Generation of waste should be avoided or minimized wherever possible.  
 Chemical waste, even small quantities, is neither allowed to be poured down drains, sewage system or waterways; nor disposed with household garbage.  
 Dispose of contents/containers in accordance with local, regional, national, and international regulations.

### Unused and Uncontaminated Packagings

· **Recommendation** Dispose of according to your local waste regulations.

## 14 Transport information

### UN-Number

· DOT, ADR, ADN, IMDG, IATA Not Regulated

### UN Proper Shipping Name

· DOT, ADN, IMDG, IATA Not Regulated

### Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA  
 · Class Not Regulated

### Packing group

· DOT, ADR, IMDG, IATA Not Regulated

### Environmental Hazards:

Not applicable.

### Special Precautions:

Not applicable.

### Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

### UN "Model Regulation":

Not Regulated

## 15 Regulatory information

### USA Regulation Lists

· SARA (Superfund Amendments and Reauthorization Act of 1986)

· Section 302 (Extremely Hazardous Substances)

None of the ingredients is listed.

· Section 313 (Toxics Release Inventory (TRI) reporting)

67-56-1 Methanol

0.1-1%

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· **Section 311/312 (Hazardous Chemical Inventory Reporting)**

1185-55-3	Trimethoxy(methyl)silane	A, C	5-<10%
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· **Hazard Abbreviations for SARA 311/312**

A - Acute Health Hazard  
 C - Chronic Health Hazard  
 F - Fire Hazard  
 R - Reactive Hazard  
 S - Sudden Release of Pressure Hazard

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

· **Proposition 65**

· **Chemicals Known to Cause Cancer**

None of the ingredients is listed.

· **Chemicals Known to Cause Reproductive Toxicity for Females**

None of the ingredients is listed.

· **Chemicals Known to Cause Reproductive Toxicity for Males**

None of the ingredients is listed.

· **Chemicals Known to Cause Developmental Toxicity**

67-56-1 Methanol

· **Carcinogenic Categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value Established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **International Regulation Lists**

· **Canadian Domestic Substance Listings:**

70131-67-8	Siloxanes and Silicones, di-Me, hydroxy-terminated
68909-20-6	Hydrolysis products of 1,1,1-trimethyl-N-(trimethylsilyl)silanamine with silica
1185-55-3	Trimethoxy(methyl)silane
556-67-2	Octamethylcyclotetrasiloxane
67-56-1	Methanol

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

1185-55-3 Trimethoxy(methyl)silane

· **Chinese Chemical Inventory of Existing Chemical Substances:**

All ingredients are listed.

· **Japanese Existing and New Chemical Substance List:**

All ingredients are listed.

· **Korean Existing Chemical Inventory:**

All ingredients are listed.

· **European Pre-registered substances:**

All ingredients are listed.

· **REACH - Substances of Very High Concern (SVHC) List:**

None of the ingredients is listed.

· **Restriction of Hazardous Substances Directive (RoHS) list:**

None of the ingredients is listed.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ACGIH: American Conference of Governmental Industrial Hygienists  
 ACToR: US EPA Aggregated Computational Toxicology Resource  
 ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road  
 BCF: Bioconcentration Factor  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 CCRIS: US NLM TOXNET Chemical Carcinogenesis Research Information System  
 CHRIP: Japan NITE Information on Biodegradation and Bioconcentration of the Existing Chemical Substances in the Chemical Risk Information Platform  
 DOT: US Department of Transportation  
 DSL: Canada Domestic Substance List

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ESIS: European Chemical Substances Information System  
 HMIS: US National Paint & Coatings Association (NPCA) Hazardous Materials Identification System  
 HSDB: US NLM TOXNET Hazardous Substances Databank  
 HSNO CCID: New Zealand Hazardous Substances and New Organisms Chemical Classification Information Database  
 IARC: International Agency for Research on Cancer developed by United Nations World Health Organisation (WHO)  
 IATA-DGR: Dangerous Goods Regulations (DGR) by the International Air Transport Association (IATA)  
 ICAO-TI: Technical Instructions (TI) by the International Civil Aviation Organization (ICAO)  
 ICSC: International Chemical Safety Cards  
 IMDG: International Maritime Dangerous Goods; the principal international rules for International Carriage of Dangerous Goods by SEA under the Recommendations on the Transport of Dangerous Goods by United Nations (RTDG)  
 Koc: Partition coefficient, soil Organic Carbon to water  
 LC50/LD50: Lethal Concentration/Dose, 50 percent  
 N/a: Not available or Not applicable  
 NFPA: US National Fire Protection Association  
 NIOSH: US National Institute of Occupational Safety and Health  
 NITE: National Institute of Technology and Evaluation, Japan  
 OECD: Organisation for Economic Co-operation and Development  
 OSHA: US Occupational Safety and Health Administration  
 P: Marine Pollutant  
 RCRA: Resource Conservation and Recovery Act (USA)  
 REACh: EU Registry, Evaluation and Authorisation of Chemicals  
 RID: the Regulations Concerning the International Carriage of Dangerous Goods by Rail; published by the Central Office for International Carriage by Rail (OTIF)  
 RTDG: the Recommendations on the Transport of Dangerous Goods by United Nations (UN)  
 RTECS: US Registry of Toxic Effects of Chemical Substances  
 SARA: US Superfund Amendments and Reauthorization Act  
 SIDS: OECD existing chemicals Screening Information Data Sets  
 SVHC: EU ECHA Substance of Very High Concern  
 TEEL: Temporary Emergency Exposure Limit developed by US Subcommittee on Consequence Assessment and Protective Actions (SCAPA) of US Department of Energy (DOE)  
 TOXLINE: US NLM bibliographic database search system  
 TSCA: US Toxic Substance Control Act  
 · **Date of preparation / last revision** 08/26/2016 / -

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