SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form: Mixture
Physical state: Liquid
Product name: OCTADECYLDIMETHYL(3-TRIMETHOXYSILYLPROPYL)AMMONIUM CHLORIDE, 60% in methanol
Product code: SIO6620.0
Formula: C26H58ClNO3Si
Synonyms: (TRIMETHOXYSILYLPROPYL)OCTADECYLDIMETHYLAMMONIUM CHLORIDE; DIMETHYLOCTADECYL[3-(TRIMETHOXYSILYL)PROPYL]AMMONIUM CHLORIDE
Chemical family: ORGANOMETHOXYSILANE

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: Chemical intermediate
For research and industrial use only

1.3. Details of the supplier of the safety data sheet
GELEST, INC.
11 East Steel Road
Morrisville, PA 19067
USA
T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST
info@gelest.com - www.gelest.com

1.4. Emergency telephone number
Emergency number: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (GHS-US)
Flam. Liq. 2 H225
Acute Tox. 3 (Oral) H301
Acute Tox. 3 (Dermal) H311
Acute Tox. 3 (Inhalation: vapour) H331
Skin Irrit. 2 H315
Eye Dam. 1 H318
STOT SE 1 H370
STOT SE 3 H336
Full text of H-phrases: see section 16

2.2. Label elements
GHS-US labeling
Hazard pictograms (GHS-US):

Signal word (GHS-US): Danger
Hazard statements (GHS-US):
- H225 - Highly flammable liquid and vapor
- H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
- H315 - Causes skin irritation
- H318 - Causes serious eye damage
- H336 - May cause drowsiness or dizziness
- H370 - Causes damage to organs

Precautionary statements (GHS-US):
- P280 - Wear protective gloves, protective clothing, eye protection, face protection
- P362 - Take off contaminated clothing and wash before reuse
- P260 - Do not breathe vapors
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
- P332+P313 - If skin irritation occurs: Get medical advice/attention
OCTADECYLDIMETHYL(3-TRIMETHOXYSYLPROPYL)AMMONIUM CHLORIDE, 60% in methanol
Safety Data Sheet

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P302+P352 - If on skin: Wash with plenty of water...
P301+P310 - If swallowed: Immediately call a poison center/doctor/...
P330 - Rinse mouth
P312 - Call a poison center/doctor/... if you feel unwell
P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking
P233 - Keep container tightly closed
P243 - Take precautionary measures against static discharge
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical equipment
P242 - Use only non-sparking tools
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P370+P378 - In case of fire: Use water spray, foam, carbon dioxide, dry chemical to extinguish
P403+P235 - Keep in a cool place
P405 - Store locked up
P501 - Dispose of contents/container to licensed waste disposal facility.

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS-US)
No data available

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octadecyldimethyl(3-trimethoxysilyl)ammonium chloride</td>
<td>(CAS No) 27668-52-6</td>
<td>55 - 75</td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td>Methanol</td>
<td>(CAS No) 67-56-1</td>
<td>25 - 45</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td>3-Chloropropyltrimethoxysilane</td>
<td>(CAS No) 2530-87-2</td>
<td>&lt; 5</td>
<td>Flam. Liq. 4, H227</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label. Call a POISON CENTER or doctor/physician.

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

First-aid measures after skin contact: Remove/take off immediately all contaminated clothing. Wash with plenty of soap and water. Immediately call a poison center or doctor/physician. Wash contaminated clothing before reuse.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries: Causes damage to organs.
Symptoms/injuries after skin contact: Toxic in contact with skin. Causes skin irritation. Repeated exposure to this material can result in absorption through skin causing significant health hazard.
Symptoms/injuries after eye contact: Causes serious eye damage.
Symptoms/injuries after ingestion: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard. Oral toxicity is associated with methanol, the solvent and a hydrolysis product which causes nausea, vomiting, headache, visual effects including blindness. Onset of symptoms may be delayed up to 48 hours.

01/08/2015  EN (English US)  SDS ID: SIO6620.0  2/10
Chronic symptoms: Methanol may effect the central nervous system resulting in persistent or recurring headaches or impaired vision.

4.3. Indication of any immediate medical attention and special treatment needed

NOTE TO PHYSICIAN: The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning. The therapeutic intravenous administration of ethanol (10 mls/hour) allows methanol to be preferentially oxidized and reduces production of methanol metabolites. Acidosis must be treated with intravenous administration of sodium bicarbonate and methanol elimination may be increased by hemodialysis, as indicated. Treatment should be based on blood methanol levels and acid-base balance.

SECTION 5: Firefighting measures

5.1. Extinguishing media


5.2. Special hazards arising from the substance or mixture

Fire hazard: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame. Highly flammable liquid and vapor.

Explosion hazard: May form flammable/explosive vapor-air mixture.

5.3. Advice for firefighters

Firefighting instructions: Use water spray to cool exposed surfaces. Exercise caution when fighting any chemical fire.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapor and mist.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Remove ignition sources. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection. Avoid breathing vapors.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed: Containers must be properly grounded before beginning transfer. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent accumulation of vapors. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Do not breathe vapors.

Precautions for safe handling: Handle empty containers with care because residual vapors are flammable.

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof ventilating equipment.

Storage conditions: Keep container tightly closed.


Storage area: Store in a well-vented place. Store away from heat.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Methanol (67-56-1)</th>
<th>USA ACGIH</th>
<th>ACGIH TWA (ppm)</th>
<th>200 ppm</th>
</tr>
</thead>
</table>
OCTADECYLDIMETHYL(3-TRIMETHOXYSILYLPROPYL)AMMONIUM CHLORIDE, 60% in methanol
Safety Data Sheet

| USA ACGIH | ACGIH STEL (ppm) | 250 ppm |
| USA NIOSH | NIOSH REL (TWA) (mg/m³) | 260 mg/m³ |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 200 ppm |
| USA NIOSH | NIOSH REL (STEL) (mg/m³) | 325 mg/m³ |
| USA NIOSH | NIOSH REL (STEL) (ppm) | 250 ppm |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 260 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 200 ppm |
| USA IDLH | US IDLH (ppm) | 6000 ppm |

### 8.2. Exposure controls

**Appropriate engineering controls**
Provide local exhaust or general room ventilation.

**Personal protective equipment**
Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

**Hand protection**
Neoprene or nitrile rubber gloves.

**Eye protection**
Chemical goggles. Contact lenses should not be worn.

**Skin and body protection**
Wear suitable protective clothing.

**Respiratory protection**
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified combination organic vapor - amine gas (brown cartridge) respirator.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>496.29 g/mol</td>
</tr>
<tr>
<td>Color</td>
<td>Straw</td>
</tr>
<tr>
<td>Odor</td>
<td>Amine-like</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>68 °C (initial, methanol)</td>
</tr>
<tr>
<td>Flash point</td>
<td>15 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>230 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Highly flammable liquid and vapor</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>50 mm Hg @ 25°C</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.89</td>
</tr>
<tr>
<td>VOC content</td>
<td>40 %</td>
</tr>
<tr>
<td>Solubility</td>
<td>Reacts with water. Dissolves</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>6 - 36.5 vol %</td>
</tr>
</tbody>
</table>

#### 9.2. Other information
No additional information available
## SECTION 10: Stability and reactivity

### 10.1. Reactivity
No additional information available.

### 10.2. Chemical stability
Stable when stored in sealed containers.

### 10.3. Possibility of hazardous reactions
Reacts with water and moisture in air, liberating methanol.

### 10.4. Conditions to avoid
Heat. Sparks. Open flame.

### 10.5. Incompatible materials

### 10.6. Hazardous decomposition products
Organic acid vapors. Methanol.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

<table>
<thead>
<tr>
<th>Substance</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Vapour (mg/l/4h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTADECYLDIMETHYL(3-TRIMETHOXYSILYLPROPYL)AMMONIUM CHLORIDE, 60% in methanol (27668-52-6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>100,000</td>
<td>300,000</td>
<td></td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>300,000</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Methanol (67-56-1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>6200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>22500 (Exposure time: 8 h)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>300,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATE US (vapors)</td>
<td>3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-Chloropropyltrimethoxysilane (2530-87-2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>5628</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>2830</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Skin corrosion/irritation
- Causes skin irritation.

#### Respiratory or skin sensitization
- Not classified

#### Germ cell mutagenicity
- Not classified

#### Carcinogenicity
- Not classified

#### Reproductive toxicity
- Not classified

#### Specific target organ toxicity (single exposure)
- Causes damage to organs. May cause drowsiness or dizziness.

#### Specific target organ toxicity (repeated exposure)
- Not classified

#### Aspiration hazard
- Not classified

#### Potential Adverse human health effects and symptoms
- Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.

#### Symptoms/injuries after inhalation

#### Symptoms/injuries after skin contact
- Toxic in contact with skin. Causes skin irritation. Repeated exposure to this material can result in absorption through skin causing significant health hazard.

#### Symptoms/injuries after eye contact
- Causes serious eye damage.

#### Symptoms/injuries after ingestion
- Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard. Oral toxicity is associated with methanol, the solvent and a hydrolysis product which causes nausea, vomiting, headache, visual effects including blindness. Onset of symptoms may be delayed up to 48 hours.

#### Chronic symptoms
- Methanol may effect the central nervous system resulting in persistent or recurring headaches or impaired vision.
SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Methanol (67-56-1)</th>
<th>LC50 fish 1</th>
<th>28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LC50 fish 2</td>
<td>&gt; 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Methanol (67-56-1)</th>
<th>BCF fish 1</th>
<th>&lt; 10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Log Pow</td>
<td>-0.77</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer: No additional information available
Effect on the global warming: No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations: May be incinerated. Dispose of contents/container to licensed waste disposal facility.
Additional information: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials: Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

14.1. UN number

UN-No.(DOT): 1993
DOT NA no.: UN1993

14.2. UN proper shipping name

Proper Shipping Name (DOT): FLAMMABLE LIQUIDS, N.O.S. (OCTADECYLDIMETHYL(3-TRIMETHOXYSILYLPROPYL)AMMONIUM CHLORIDE, 60% in methanol)
Department of Transportation (DOT) Hazard Classes: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT): 3 - Flammable liquid

DOT Symbols: G - Identifies PSN requiring a technical name
Packing group (DOT): II - Medium Danger
DOT Packaging Exceptions (49 CFR 173.xxx): 150
DOT Packaging Non Bulk (49 CFR 173.xxx): 202
DOT Packaging Bulk (49 CFR 173.xxx): 242

14.3. Additional information

Other information: No supplementary information available.

Transport by sea

DOT Vessel Stowage Location: B - (i) The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) “On deck only” on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): 5 L
### OCTADECYLDIMETHYL(3-TRIMETHOXYSILYLPROPYL)AMMONIUM CHLORIDE, 60% in methanol

#### Safety Data Sheet

**DOT Quantity Limitations** Cargo aircraft only (49 : 60 L) 
(CFR 175.75)

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

**Methanol (67-56-1)**
- Listed on the United States TSCA (Toxic Substances Control Act) inventory
- Listed on United States SARA Section 313

**Octadecyldimethyl(3-trimethoxysilyl)ammonium chloride (27668-52-6)**
- Listed on the United States TSCA (Toxic Substances Control Act) inventory

**3-Chloropropytrimethoxysilane (2530-87-2)**
- Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

**Methanol (67-56-1)**
- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on the Canadian DSL (Domestic Substances List)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

**Octadecyldimethyl(3-trimethoxysilyl)ammonium chloride (27668-52-6)**
- Listed on the AICS (Australian Inventory of Chemical Substances)
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- Listed on NZIoC (New Zealand Inventory of Chemicals)
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**3-Chloropropytrimethoxysilane (2530-87-2)**
- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on the Canadian DSL (Domestic Substances List)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

### 15.3. US State regulations

#### OCTADECYLDIMETHYL(3-TRIMETHOXYSILYLPROPYL)AMMONIUM CHLORIDE, 60% in methanol (27668-52-6)

<table>
<thead>
<tr>
<th>State</th>
<th>Proposition 65 - Carcinogens List</th>
<th>Proposition 65 - Developmental Toxicity</th>
<th>Proposition 65 - Reproductive Toxicity - Female</th>
<th>Proposition 65 - Reproductive Toxicity - Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>U.S. - California</td>
<td>No</td>
<td>No</td>
<td>No</td>
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</table>

<table>
<thead>
<tr>
<th>State</th>
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<th>Proposition 65 - Developmental Toxicity</th>
<th>Proposition 65 - Reproductive Toxicity - Female</th>
<th>Proposition 65 - Reproductive Toxicity - Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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</tbody>
</table>

#### Methanol (67-56-1)

<table>
<thead>
<tr>
<th>State</th>
<th>Proposition 65 - Carcinogens List</th>
<th>Proposition 65 - Developmental Toxicity</th>
<th>Proposition 65 - Reproductive Toxicity - Female</th>
<th>Proposition 65 - Reproductive Toxicity - Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California</td>
<td>No</td>
<td>No</td>
<td>No</td>
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</tbody>
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#### Octadecyldimethyl(3-trimethoxysilyl)ammonium chloride (27668-52-6)

<table>
<thead>
<tr>
<th>State</th>
<th>Proposition 65 - Carcinogens List</th>
<th>Proposition 65 - Developmental Toxicity</th>
<th>Proposition 65 - Reproductive Toxicity - Female</th>
<th>Proposition 65 - Reproductive Toxicity - Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
# OCTADECYLDIMETHYL(3-TRIMETHOXYSILYLPROPYL)AMMONIUM CHLORIDE, 60% in methanol

## Safety Data Sheet

### Methanol (67-56-1)

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<th>No</th>
<th>No</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Chloropropyltrimethoxysilane (2530-87-2)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>No</th>
<th>No</th>
<th>No</th>
</tr>
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<tbody>
<tr>
<td>U.S. - Massachusetts - Oil &amp; Hazardous Material List - Soil Reportable Concentration - Reporting Category 1</td>
<td>U.S. - Massachusetts - Oil &amp; Hazardous Material List - Soil Reportable Concentration - Reporting Category 2</td>
<td>U.S. - Massachusetts - Right To Know List</td>
<td>U.S. - Massachusetts - Threshold Effects Exposure Limits (TELs)</td>
<td>U.S. - Massachusetts - Toxics Use Reduction Act</td>
</tr>
<tr>
<td>U.S. - Texas - Effects Screening Levels - Short Term</td>
<td>U.S. - Vermont - Permissible Exposure Limits - Skin Designations</td>
<td></td>
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</tbody>
</table>
OCTADECYLDIMETHYL(3-TRIMETHOXYETHYLPROPYL)AMMONIUM CHLORIDE, 60% in methanol

Safety Data Sheet

Methanol (67-56-1)

U.S. - Vermont - Permissible Exposure Limits - STELs
U.S. - Vermont - Permissible Exposure Limits - TWAs
U.S. - Washington - Dangerous Waste - Discarded Chemical Products List
U.S. - Washington - Permissible Exposure Limits - Skin Designations
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs

3-Chloropropyltrimethoxysilane (2530-87-2)

U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

SECTION 16: Other information

Abbreviations and acronyms:
Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development.

Full text of H-phrases:

Acute Tox. 3 (Dermal) Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:vapour) Acute toxicity (inhalation:vapor) Category 3
Acute Tox. 3 (Oral) Acute toxicity (oral) Category 3
Eye Dam. 1 Serious eye damage/eye irritation Category 1
Eye Irrit. 2A Serious eye damage/eye irritation Category 2A
Flam. Liq. 2 Flammable liquids Category 2
Flam. Liq. 4 Flammable liquids Category 4
Skin Irrit. 2 Skin corrosion/irritation Category 2
STOT SE 1 Specific target organ toxicity (single exposure) Category 1
STOT SE 3 Specific target organ toxicity (single exposure) Category 3
H225 Highly flammable liquid and vapor
H227 Combustible liquid
H301 Toxic if swallowed
H311 Toxic in contact with skin
H315 Causes skin irritation
H318 Causes serious eye damage
H319 Causes serious eye irritation
H331 Toxic if inhaled
H336 May cause drowsiness or dizziness
H370 Causes damage to organs

HMIS III Rating

Health: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability: 4 Severe Hazard

Physical: 0 Minimal Hazard

Prepared by safety and environmental affairs.

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SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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