N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol

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

<table>
<thead>
<tr>
<th>1.1. Product identifier</th>
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</thead>
<tbody>
<tr>
<td>Product form : Mixture</td>
</tr>
<tr>
<td>Physical state : Liquid</td>
</tr>
<tr>
<td>Product name : N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol</td>
</tr>
<tr>
<td>Product code : SIT8414.0</td>
</tr>
<tr>
<td>Formula : C18H42ClNO3Si</td>
</tr>
<tr>
<td>Synonyms : N,N,N-TRIBUTYL-3-(TRIMETHOXYSLYL)-1-PROPANAMMINIUM CHLORIDE</td>
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<td>Chemical family : ORGANOMETHOXYSLANE</td>
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**SECTION 2: Hazards identification**

<table>
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<tr>
<th>2.1. Classification of the substance or mixture</th>
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<tbody>
<tr>
<td>Classification according to Regulation (EC) No. 1272/2008 [CLP]</td>
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<tr>
<td>Flammable liquids, Category 2 : H225</td>
</tr>
<tr>
<td>Acute toxicity (oral), Category 3 : H301</td>
</tr>
<tr>
<td>Acute toxicity (dermal), Category 3 : H311</td>
</tr>
<tr>
<td>Acute toxicity (inhalation:vapour) Category 3 : H331</td>
</tr>
<tr>
<td>Skin corrosion/irritation, Category 2 : H315</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation, Category 2 : H319</td>
</tr>
<tr>
<td>Specific target organ toxicity — Single exposure, Category 1 : H370</td>
</tr>
<tr>
<td>Full text of H statements : see section 16</td>
</tr>
</tbody>
</table>

Adverse physicochemical, human health and environmental effects

No additional information available
N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol
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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):  
- GHS02  
- GHS06  
- GHS08

Signal word (CLP): Danger
Hazardous ingredients: Methanol
Hazard statements (CLP):  
- H225 - Highly flammable liquid and vapour.  
- H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled  
- H315 - Causes skin irritation.  
- H319 - Causes serious eye irritation.  
- H370 - Causes damage to organs.

Precautionary statements (CLP):  
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
- P240 - Ground/bond container and receiving equipment.  
- P260 - Do not breathe vapours.  
- P264 - Wash hands thoroughly after handling.  
- P308+P311 - IF exposed or concerned: Call a POISON CENTER.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
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</thead>
<tbody>
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<td>Methanol</td>
<td>(CAS-No.) 67-56-1</td>
<td>&gt; 45</td>
<td>Flam. Liq. 2, H225, Acute Tox. 3 (Oral), H301, H311, H331, STOT SE 1, H370</td>
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<tr>
<td></td>
<td>(EC-No.) 200-659-6</td>
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<tr>
<td></td>
<td>(EC Index-No.) 603-001-00-X</td>
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<tr>
<td>N-Trimethoxysilylpropyl-n,n,n-tri-n-butylammonium chloride</td>
<td>(CAS-No.) 143203-33-2</td>
<td>&gt; 45</td>
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<tr>
<td>3-Chloropropyltrimethoxysilane</td>
<td>(CAS-No.) 2530-87-2</td>
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<td>(EC-No.) 219-787-9</td>
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Specific concentration limits:

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<th>Product identifier</th>
<th>Specific concentration limits</th>
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<td>(3 &lt;=C &lt; 10) STOT SE 2, H371</td>
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<td></td>
<td>(EC-No.) 200-659-6</td>
<td>(10 &lt;=C &lt; 100) STOT SE 1, H370</td>
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<tr>
<td></td>
<td>(EC Index-No.) 603-001-00-X</td>
<td></td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

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/doctor.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact: Wash with plenty of water/. . . . Get medical advice/attention.

First-aid measures after eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol
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First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects: Causes damage to organs.
Symptoms/effects 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/effects after eye contact: Causes serious eye damage.
Symptoms/effects 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.

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. Acidity 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

Unsuitable extinguishing media: Do not use straight streams.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Highly flammable liquid and vapour. Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.
Explosion hazard: May form flammable/explosive vapour-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 vapour and mist.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Eliminate every possible source of ignition. Use special care to avoid static electric charges.
6.1.1. For non-emergency personnel

Protective equipment: Wear protective equipment as described in Section 8.
Emergency procedures: Evacuate unnecessary personnel.
6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

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

For containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
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. Use only non-sparking tools.

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: Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling:
Avoid all eye and skin contact and do not breathe vapour and mist. Containers must be properly grounded before beginning transfer. Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area. Use only non-sparking tools.

Hygiene measures:
Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

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. Store in sealed containers in the dark. Store locked up.

Incompatible materials:

Storage area:
Store in a well-ventilated 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>Country</th>
<th>Parameter</th>
<th>Level</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Methanol (67-56-1)</td>
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<tr>
<td>EU</td>
<td>EU IOELV TWA (mg/m³)</td>
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</tr>
<tr>
<td>EU</td>
<td>EU IOELV TWA (ppm)</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Austria</td>
<td>MAK (mg/m³)</td>
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</tr>
<tr>
<td>Austria</td>
<td>MAK (ppm)</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Austria</td>
<td>MAK Short time value (mg/m³)</td>
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</tr>
<tr>
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<td>MAK Short time value (ppm)</td>
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<td>Belgium</td>
<td>Limit value (mg/m³)</td>
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<tr>
<td>Belgium</td>
<td>Limit value (ppm)</td>
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<tr>
<td>Belgium</td>
<td>Short time value (mg/m³)</td>
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<tr>
<td>Belgium</td>
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</tr>
<tr>
<td>Germany</td>
<td>TRGS 900 Occupational exposure limit value (mg/m³)</td>
<td>270 mg/m³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)</td>
</tr>
<tr>
<td>Germany</td>
<td>TRGS 900 Occupational exposure limit value (ppm)</td>
<td>200 ppm (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)</td>
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<tr>
<td>Germany</td>
<td>TRGS 903 Biological limit value</td>
<td>30 mg/l (Medium: urine - Time: end of shift - Parameter: Methanol) 30 mg/l (Medium: urine - Time: end of several shifts - Parameter: Methanol (for long-term exposures)</td>
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<td>Gibraltar</td>
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### Methanol (67-56-1)

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<tr>
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<td>(mg/m³)</td>
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<td>(ppm)</td>
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</tr>
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<td>200 ppm</td>
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<tr>
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</table>
N-TRIMETHOXYSILYLPORPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol

Safety Data Sheet

### Methanol (67-56-1)

<table>
<thead>
<tr>
<th>Canada (Quebec)</th>
<th>VECD (mg/m³)</th>
<th>328 mg/m³</th>
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</thead>
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<td>TWA (ppm)</td>
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</tr>
<tr>
<td>Australia</td>
<td>STEL (mg/m³)</td>
<td>328 mg/m³</td>
</tr>
<tr>
<td>Portugal</td>
<td>OEL TWA (mg/m³)</td>
<td>260 mg/m³ (indicative limit value)</td>
</tr>
<tr>
<td>Portugal</td>
<td>OEL TWA (ppm)</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Portugal</td>
<td>OEL STEL (ppm)</td>
<td>250 ppm</td>
</tr>
<tr>
<td>Portugal</td>
<td>OEL chemical category (PT)</td>
<td>skin - potential for cutaneous exposure indicative limit value</td>
</tr>
</tbody>
</table>

### 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 or face shield. 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

- **Physical state**: Liquid
- **Appearance**: Liquid.
- **Molecular mass**: 384.08 g/mol
- **Colour**: Straw. Amber.
- **Odour**: Amine. Ammonia-like.
- **Odour threshold**: No data available
- **Refractive index**: No additional information available
- **pH**: No data available
- **Relative evaporation rate (butylacetate=1)**: No data available
- **Melting point**: < 0 °C
- **Freezing point**: No data available
- **Boiling point**: 68 °C (initial, methanol)
- **Flash point**: 11 °C
- **Auto-ignition temperature**: No data available
- **Decomposition temperature**: No data available
- **Flammability (solid, gas)**: Highly flammable liquid and vapour.
- **Vapour pressure**: 50 mm Hg @ 25°C
- **Relative vapour density at 20 °C**: 5.9 (methanol)
- **Relative density**: 0.88
- **% Volatiles**: 50 %
- **Solubility**: Reacts with water. Dissolves.
N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol
Safety Data Sheet

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : 6 - 36.5 vol % (lower; upper: methanol)

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
Methanol. Organic amine vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.

N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol (143203-33-2)
ATE CLP (oral) 153.846 mg/kg bodyweight
ATE CLP (dermal) 461.538 mg/kg bodyweight
ATE CLP (vapours) 4.615 mg/l/4h

Methanol (67-56-1)
LC50 inhalation rat (ppm) 22500 ppm (Exposure time: 8 h)
ATE CLP (oral) 100 mg/kg bodyweight
ATE CLP (dermal) 300 mg/kg bodyweight
ATE CLP (vapours) 3 mg/l/4h

3-Chloropropyltrimethoxysilane (2530-87-2)
LD50 oral rat 5628 mg/kg
LD50 dermal rabbit 2830 µl/kg

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified


Symptoms/effects 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/effects after eye contact : Causes serious eye damage.
N-TRIMETHOXYSILYLPNPYLP-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol

Safety Data Sheet

Symptoms/effects 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.

Reason for classification: Expert judgment

SECTION 12: Ecological information

12.1. Toxicity
Acute aquatic toxicity: Not classified
Chronic aquatic toxicity: Not classified

Methanol (67-56-1)
LC50 fish 1: 28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2: > 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
Methanol (67-56-1)
BCF fish 1: < 10
Log Pow: -0.77

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
Other adverse effects: This substance may be hazardous to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Sewage disposal recommendations: Do not dispose of waste into sewer.
Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.
Additional information: Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

14.1. UN number
In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number
UN-No. (ADR): 1992
UN-No. (IMDG): 1992
UN-No. (IATA): 1992
UN-No. (ADN): 1992
UN-No. (RID): 1992

14.2. UN proper shipping name
Proper Shipping Name (ADR): FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (IMDG): FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (IATA): Flammable liquid, toxic, n.o.s.
Proper Shipping Name (ADN): FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (RID): FLAMMABLE LIQUID, TOXIC, N.O.S.
### Transport document description (IATA)
- UN 1992 Flammable liquid, toxic, n.o.s. (N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol), 3 (6.1), II

### Transport document description (ADN)
- UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol), 3 (6.1), II

### Transport document description (RID)
- UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol), 3 (6.1), II

#### 14.3 Transport hazard class(es)

**ADR**
- Transport hazard class(es) (ADR): 3 (6.1)
- Danger labels (ADR): 3, 6.1

**IMDG**
- Transport hazard class(es) (IMDG): 3 (6.1)
- Danger labels (IMDG): 3, 6.1

**IATA**
- Transport hazard class(es) (IATA): 3 (6.1)
- Hazard labels (IATA): 3, 6.1

**ADN**
- Transport hazard class(es) (ADN): 3 (6.1)
- Danger labels (ADN): 3, 6.1

**RID**
- Transport hazard class(es) (RID): 3 (6.1)
- Danger labels (RID): 3, 6.1

#### 14.4 Packing group

- Packing group (ADR): II
- Packing group (IMDG): II
- Packing group (RID): II
N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol

Safety Data Sheet

Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards
Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user
- Overland transport
  Classification code (ADR) : FT1
  Special provisions (ADR) : 274
  Limited quantities (ADR) : 1 L
  Excepted quantities (ADR) : E2
  Packing instructions (ADR) : P001, IBC02
  Mixed packing provisions (ADR) : MP19
  Portable tank and bulk container instructions (ADR) : T7
  Portable tank and bulk container special provisions (ADR) : TP2
  Tank code (ADR) : L4BH
  Tank special provisions (ADR) : TU15
  Vehicle for tank carriage : FL
  Transport category (ADR) : 2
  Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28
  Special provisions for carriage - Operation (ADR) : S2, S22
  Hazard identification number (Kemler No.) : 336
  Orange plates : 336
  Tunnel restriction code (ADR) : D/E

- Transport by sea
  Special provisions (IMDG) : 274
  Limited quantities (IMDG) : 1 L
  Excepted quantities (IMDG) : E2
  Packing instructions (IMDG) : P001
  IBC packing instructions (IMDG) : IBC02
  Tank instructions (IMDG) : T7
  Tank special provisions (IMDG) : TP2, TP13
  EmS-No. (Fire) : F-E
  EmS-No. (Spillage) : S-D
  Stowage category (IMDG) : B
  Stowage and handling (IMDG) : SW2
  Properties and observations (IMDG) : Flammable toxic liquid which is not specified by name in this class or, on account of its characteristics, in some other class. Toxic if swallowed, by skin contact or by inhalation.

- Air transport
  PCA Excepted quantities (IATA) : E2
  PCA Limited quantities (IATA) : Y341
  PCA limited quantity max net quantity (IATA) : 1 L
  PCA packing instructions (IATA) : 352
  PCA max net quantity (IATA) : 1 L
  CAO packing instructions (IATA) : 364
  CAO max net quantity (IATA) : 60 L
N-TRIMETHOXYSILYLPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol
Safety Data Sheet

Special provisions (IATA) : A3
ERG code (IATA) : 3HP

- Inland waterway transport
Classification code (ADN) : FT1
Special provisions (ADN) : 274, 802
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EP, EX, TOX, A
Ventilation (ADN) : VE01, VE02
Number of blue cones/lights (ADN) : 2

- Rail transport
Classification code (RID) : FT1
Special provisions (RID) : 274
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2
Packing instructions (RID) : P001, IBC02
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T7
Portable tank and bulk container special provisions (RID) : TP2
Tank codes for RID tanks (RID) : L4BH
Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28
Colis express (express parcels) (RID) : CE7
Hazard identification number (RID) : 336

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations
Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Contains no REACH Annex XIV substances

% Volatiles : 50 %

15.1.2. National regulations

Germany
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands
SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
NIET-limiteergedeelde lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
N-TRIMETHOXYSYILPROPYL-N,N,N-TRI-n-BUTYLAMMONIUM CHLORIDE, 50% in methanol

Safety Data Sheet

12.1. NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid

None of the components are listed

12.2. NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

Methanol is listed

14.3. Denmark

Class for fire hazard : Class I-1
Store unit : 1 liter
Classification remarks : F «Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

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; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

Other information : Prepared by safety and environmental affairs.

Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal) Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation: vapour) Acute toxicity (inhaled/vapour) Category 3
Acute Tox. 3 (Oral) Acute toxicity (oral), Category 3
Eye Irrit. 2 Serious eye damage/eye irritation, Category 2
Flam. Liq. 2 Flammable liquids, Category 2
Skin Irrit. 2 Skin corrosion/irritation, Category 2
STOT SE 1 Specific target organ toxicity — Single exposure, Category 1
STOT SE 2 Specific target organ toxicity — Single exposure, Category 2
H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H370 Causes damage to organs.
H371 May cause damage to organs.

SDS EU (REACH Annex II) - Custom

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