

# SAFETY DATA SHEET



Based on Directive 2001/58/EC of the Commission of the European Communities

## TEC 7

### 1. Identification of the substance/preparation and of the company/undertaking

#### 1.1 Identification of the substance or preparation:

Synonyms: None

CAS No. : N.A.  
EC index No. : N.A.      NFPA code : N.D.  
EINECS No. : N.A.      Molecular weight : N.A.  
RETCS No. : N.A.      Formula : N.A.

#### 1.2 Use of the substance or the preparation:

Adhesive

#### 1.3 Company/undertaking identification:

NOVATECH NV  
Industrielaan 3B  
B-2250 Olen  
Tel. : +32 14 85 97 37  
Fax : +32 14 85 97 38

#### 1.4 Telephone number for emergency:

+32 14 58 45 45  
Brandweerinformatiecentrum voor gevaarlijke stoffen (B.I.G.)  
Technische Schoolstraat 43 A, B-2440 Geel

### 2. Composition/information on ingredients

Hazardous ingredients	CAS No. EINECS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
trimethoxyvinylsilane	2768-02-7 220-449-8	1-5	Xn	10-20-65 (1)

(1) For R-phrases in full: see heading 16

### 3. Hazards identification

- No hazard classification according to the criteria of directives 67/548/EEC and 1999/45/EC

### 4. First aid measures

#### 4.1 Eye contact:

- If irritation persists: consult a doctor/medical service
- Rinse with water
- Do not apply neutralizing agents

#### 4.2 Skin contact:

- If irritation persists: consult a doctor/medical service
- Rinse with water
- Soap may be used

#### 4.3 After inhalation:

- If breathing problems develop: consult a doctor/medical service
- Remove the victim into fresh air
- Unconscious: maintain adequate airway and respiration

#### 4.4 After ingestion:

- If you feel unwell: consult a doctor/medical service
- Never give water to an unconscious person

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Reference number : BIG\32163GB      Revision number : 003  
Reason for revision : see 2/15

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## 5. Fire-fighting measures

- 5.1 Suitable extinguishing media:**
- Water spray
  - Polyvalent foam
  - BC powder
  - Carbon dioxide
  - Sand
- 5.2 Unsuitable extinguishing media:**
- No data available
- 5.3 Special exposure hazards:**
- Non combustible
  - On heating: release of harmful gases/vapours e.g. carbon monoxide and carbon dioxide
- 5.4 Instructions:**
- No specific firefighting instructions required
- 5.5 Special protective equipment for firefighters:**
- Heat/fire exposure: compressed air/oxygen apparatus
  - Protective clothing for exposure to chemicals

## 6. Accidental release measures

- 6.1 Personal protection/precautions:**  
See headings 8.1/8.3/10.3
- 6.2 Environmental precautions:**
- Contain leaking substance, pump over in suitable containers
  - Plug the leak, cut off the supply
- 6.3 Methods of cleaning up:**
- Solid spill: shovel in(to) closing drums
  - Wash clothing and equipment after handling

## 7. Handling and storage

- 7.1 Handling:**
- Observe normal hygiene standards
  - Immediately remove and clean contaminated clothing
- 7.2 Storage:**
- Keep container tightly closed
  - Store in a cool area
  - Store in a dry area
  - Store in a well-ventilated area
  - Keep away from: heat sources
- |                                |                              |      |
|--------------------------------|------------------------------|------|
| <b>Storage temperature</b>     | : N.D.                       | °C   |
| <b>Quantity limit</b>          | : N.D.                       | kg   |
| <b>Storage life</b>            | : N.D.                       | days |
| <b>Materials for packaging</b> | :                            |      |
| - suitable                     | : paper, fibreboard, plastic |      |
| - to avoid                     | : no data available          |      |
- 7.3 Specific uses:**
- See information supplied by the manufacturer

## 8. Exposure controls/Personal protection

### 8.1 Exposure limit values:

TLV-TWA : Not listed  
 TLV-STEL : Not listed  
 TLV-Ceiling : Not listed

OES-LTEL : Not listed  
 OES-STEL : Not listed  
 MEL-LTEL : Not listed  
 MEL-STEL : Not listed

MAK : Not listed  
 TRK : Not listed

MAC-TGG 8 h : Not listed  
 MAC-TGG 15 min. : not listed  
 MAC-Ceiling : Not listed

VME-8 h : Not listed  
 VLE-15 min. : Not listed

GWBB-8 h : not listed  
 GWK-15 min. : not listed  
 Momentary value : not listed

#### Sampling methods:

- No data available

### 8.2 Exposure controls:

8.2.1 **Occupational exposure controls:**  
 - Work under local exhaust/ventilation

8.2.2 **Environmental exposure controls:** see heading 13

### 8.3 Personal protection:

8.3.1 **respiratory protection:**  
 - Respiratory protection not required for normal conditions of use

8.3.2 **hand protection:**  
 - Gloves  
   suitable materials: No data available

- Breakthrough time: N.D.

8.3.3 **eye protection:**  
 - Safety glasses

8.3.4 **skin protection:**  
 - Protective clothing  
   suitable materials: No data available

## 9. Physical and chemical properties

### 9.1 General information:

Appearance (at 20°C)	:	Paste
Odour	:	Odourless
Colour	:	Variable in colour, depending on the composition

### 9.2 Important health, safety and environmental information:

pH value	:	N.D.	
Boiling point/boiling range	:	N.D.	°C
Flashpoint	:	N.A.	°C
Explosion limits	:	N.A.	Vol% ( °C)
Vapour pressure (at 20°C)	:	N.D.	hPa
Vapour pressure (at 50°C)	:	N.D.	hPa
Relative density (at 20°C)	:	1.53	
Water solubility	:	Insoluble	
Soluble in	:	N.D.	
Relative vapour density	:	N.D.	
Viscosity (at 20°C)	:	N.D.	Pa.s
Partition coefficient n-octanol/water	:	N.D.	
Evaporation rate			
ratio to butyl acetate	:	N.D.	
ratio to ether	:	N.D.	

### 9.3 Other information:

Melting point/melting range	:	N.D.	°C
Auto-ignition point	:	N.A.	°C
Saturation concentration	:	N.D.	g/m <sup>3</sup>

## 10. Stability and reactivity

### 10.1 Conditions to avoid/reactivity:

- On heating: release of harmful gases/vapours e.g. carbon monoxide and carbon dioxide

### 10.2 Materials to avoid:

- Keep away from: heat sources

### 10.3 Hazardous decomposition products:

- On heating: release of harmful gases/vapours
- Upon combustion CO and CO<sub>2</sub> are formed

## 11. Toxicological information

### 11.1 Acute toxicity:

trimethoxyvinylsilane

LD50 oral rat	:	7120	mg/kg
LD50 dermal rabbit	:	N.D.	mg/kg
LD50 dermal rabbit	:	3434	mg/kg
LC50 inhalation rat	:	16	mg/l/4 h
LC50 inhalation rat	:	2714	ppm/4 h

**11.2 Chronic toxicity:**

EC carc. cat. : not listed  
 EC muta. cat. : not listed  
 EC repr. cat. : not listed  
  
 Carcinogenicity (TLV) : not listed  
 Carcinogenicity (MAC) : not listed  
 Carcinogenicity (VME) : not listed  
 Carcinogenicity (GWBB) : not listed  
  
 Carcinogenicity (MAK) : not listed  
 Mutagenicity (MAK) : not listed  
 Teratogenicity (MAK) : not listed  
  
 IARC classification : not listed

**11.3 Routes of exposure:** ingestion, inhalation, eye and skin

**11.4 Acute effects/symptoms:**

- Unlikely to cause harmful effects

**11.5 Chronic effects:**

- Not listed in carcinogenicity class (IARC, EC, TLV, MAK)  
 - Not listed in mutagenicity class (EC, MAK)  
 - Not classified as toxic to reproduction (EC)

**12. Ecological information****12.1 Ecotoxicity:****trimethoxyvinylsilane:**

- LC50 (96 h) :  $\geq$  100 mg/l (BRACHYDANIO RERIO)  
 - EC50 (48 h) : 168.7 mg/l (DAPHNIA MAGNA)

**12.2 Mobility:**

- Volatile organic compounds (VOC): > 1%  
 - Insoluble in water  
 Substance sinks in water

For other physicochemical properties see section 9

**12.3 Persistence and degradability:**

- biodegradation BOD<sub>5</sub> : N.D. % ThOD  
 - water : Not readily biodegradable in water  
  
 - soil : T ½ N.D. days

**12.4 Bioaccumulative potential:**

- log P<sub>ow</sub> : N.D.  
 - BCF : N.D.

**12.5 Other adverse effects:**

- WGK : 1 (classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)  
  
 - Effect on the ozone layer : Not dangerous for the ozone layer (1999/45/EC)  
 - Greenhouse effect : No data available  
 - Effect on waste water purification : No data available

## 13. Disposal considerations

### 13.1 Provisions relating to waste:

- Waste material code (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 08 04 09 (waste adhesives and sealants containing organic solvents or other dangerous substances)
- Waste material code (Flanders): 512
- Hazardous waste (91/689/EEC)

### 13.2 Disposal methods:

- Remove to an authorized plant for the destruction, neutralization and elimination of hazardous waste
- Use appropriate containment to avoid environmental contamination

### 13.3 Packaging:

- Waste material code packaging (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 10 (packaging containing residues of or contaminated by dangerous substances)

## 14. Transport information

### 14.1 Classification of the substance in compliance with UN Recommendations

UN number	:	
CLASS	:	-
SUB RISKS	:	
PACKING	:	
PROPER SHIPPING NAME	:	

### 14.2 ADR (transport by road)

CLASS	:	NOT SUBJECT
PACKING	:	
DANGER LABEL TANKS	:	
DANGER LABEL PACKAGES	:	

### 14.3 RID (transport by rail)

CLASS	:	NOT SUBJECT
PACKING	:	
DANGER LABEL TANKS	:	
DANGER LABEL PACKAGES	:	

### 14.4 ADNR (transport by inland waterways)

CLASS	:	NOT SUBJECT
PACKING	:	
DANGER LABEL TANKS	:	
DANGER LABEL PACKAGES	:	

### 14.5 IMDG (maritime transport)

CLASS	:	NOT SUBJECT
SUB RISKS	:	
PACKING	:	
MFAG	:	
EMS	:	
MARINE POLLUTANT	:	

### 14.6 ICAO (air transport)

CLASS	:	NOT SUBJECT
SUB RISKS	:	
PACKING	:	
PACKING INSTRUCTIONS PASSENGER AIRCRAFT	:	
PACKING INSTRUCTIONS CARGO AIRCRAFT	:	

### 14.7 Special precautions in connection with transport

:	Not restricted for any mode of international transport
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## 15. Regulatory information

Labelling in accordance with EC directives 67/548/EEC and 1999/45/EC  
 (\*\*: see heading 16)

Contains N-(3-(trimethoxysilyl)propyl)-ethylenediamine  
 May produce an allergic reaction.

## 16. Other information

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**N.A.** = NOT APPLICABLE  
**N.D.** = NOT DETERMINED  
**\*** = INTERNAL CLASSIFICATION

### (\*\*) Labelling:

The labelling of the substance described in this MSDS complies with the provisions of Directive 1999/45/EC of 31 May 1999, published in the Official Journal of the European Communities L 200 of 30/07/1999. This Directive replaces Directive 88/379/EEC of 7 June 1988, published in the Official Journal of the European Communities L 187 of 16/07/1988.

Member States shall apply the laws, regulations and administrative provisions referred to in article 22 of this Directive:

- (a) to preparations not within the scope of Directive 91/414/EEC or Directive 98/8/EC as from 30 July 2002; and
- (b) to preparations within the scope of Directive 91/414/EEC or Directive 98/8/EC as from 30 July 2004.

### Full text of any R-phrases referred to under heading 2:

R10 : Flammable  
 R20 : Harmful by inhalation  
 R65 : Harmful: may cause lung damage if swallowed

### Exposure limits:

**TLV** : Threshold Limit Value - ACGIH US 2002  
**OES** : Occupational Exposure Standards - United Kingdom 1999  
**MEL** : Maximum Exposure Limits - United Kingdom 1999  
**MAK** : Maximale Arbeitsplatzkonzentrationen - Germany 2001  
**TRK** : Technische Richtkonzentrationen - Germany 2001  
**MAC** : Maximale aanvaarde concentratie - the Netherlands 2002  
**VME** : Valeurs limites de Moyenne d'Exposition - France 1999  
**VLE** : Valeurs limites d'Exposition à court terme - France 1999  
**GWBB** : Grenswaarde beroepsmatige blootstelling - Belgium 2002  
**GWK** : Grenswaarde kortstondige blootstelling - Belgium 2002  
**EC** : Indicative occupational exposure limit values - directive 2000/39/EC

**I** : Inhalable fraction = **T** : Total dust = **E** : Einatembarer Aerosolanteil  
**R** : Respirable fraction = **A** : Alveolengängiger Aerosolanteil/Alveolar dust  
**C** : Ceiling limit

<b>a:</b>	aerosol		<b>r:</b>	rook/Rauch	(fume)
<b>d:</b>	damp	(vapour)	<b>st:</b>	stof/Staub	(dust)
<b>du:</b>	dust		<b>ve:</b>	vezel	(fibre)
<b>fa:</b>	Faser	(fibre)	<b>va:</b>	vapour	
<b>fi:</b>	fibre		<b>om:</b>	oil mist	
<b>fu:</b>	fume		<b>on:</b>	olienevel/Ölnebel	(oil mist)
<b>p:</b>	poussière	(dust)	<b>part:</b>	particles	

### Chronic toxicity:

**K** : List of the carcinogenic substances and processes - The Netherlands 2002