

## TETRAETHOXYSILANE, oligomeric hydrolysate

Safety Data Sheet SIT7110.3

Date of issue: 31/08/2015 Version: 1.0

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

#### 1.1. Product identifier

Product form	: Substance
Physical state	: Liquid
Substance name	: TETRAETHOXYSILANE, oligomeric hydrolysate
Product code	: SIT7110.3
Formula	: [(C <sub>2</sub> H <sub>5</sub> O) <sub>2</sub> SiO]
Synonyms	: POLY(DIETHOXYSILANE); ETHYLSILICATE
Chemical family	: ORGANOETHOXYSILANE

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Chemical intermediate

##### 1.2.2. Uses advised against

No additional information available

#### 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](mailto:info@gelest.com) - [www.gelest.com](http://www.gelest.com)

##### GELEST INC.

Fritz-Klatte-Strasse 8  
65933 Frankfurt

##### Germany

T +49 (0) 69 3535106-500 - F +49 (0) 69 3535106-501 - (M-F): 8:00 AM - 4:00 PM

[info@gelestde.com](mailto:info@gelestde.com) - [www.gelestde.com](http://www.gelestde.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 according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3	H226
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Full text of H statements : see section 16	

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

: Warning

Hazard statements (CLP) :

: H226 - Flammable liquid and vapour.  
H319 - Causes serious eye irritation.

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### Precautionary statements (CLP)

H335 - May cause respiratory irritation.  
: 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.  
P261 - Avoid breathing vapours.  
P264 - Wash hands thoroughly after handling.  
P312 - Call a doctor if you feel unwell.

### 2.3. Other hazards

Other hazards not contributing to the classification

: Additional ethanol may be formed by reaction with moisture and water. The hydrolysis product of this compound is ethanol. Overexposure to ethanol by skin absorption, inhalation or ingestion may have a narcotic effect (headache, nausea, drowsiness). Ethanol is metabolized to acetaldehyde and acetic acid which in large quantities result in metabolic acidosis, CNS depression and death due to respiratory arrest. The US OSHA PEL (TWA) for ethanol is 1000 ppm. This product contains ethanol which is classified as a carcinogen by IARC in alcoholic beverages.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : Mono-constituent  
Name : TETRAETHOXYSILANE, oligomeric hydrolysate  
CAS-No. : 68412-37-3/11099-06-2

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tetraethoxysilane, oligomeric hydrolysate, listed under more than one CAS number	(CAS-No.) 68412-37-3/11099-06-2	95 - 100	Flam. Liq. 3, H226 Eye Irrit. 2, H319 STOT SE 3, H335
Ethyl silicate	(CAS-No.) 78-10-4 (EC-No.) 201-083-8 (EC Index-No.) 014-005-00-0	1 - 5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## 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. IF exposed or concerned: Get medical advice/attention.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.  
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 medical advice/attention.  
First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

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

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. May be harmful if inhaled.  
Symptoms/effects after skin contact : May cause skin irritation.  
Symptoms/effects after eye contact : Causes serious eye irritation.  
Symptoms/effects after ingestion : May be harmful if swallowed.  
Chronic symptoms : On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system.

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.  
Unsuitable extinguishing media : Do not use straight streams.

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### 5.2. Special hazards arising from the substance or mixture

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

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. 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 : Remove ignition sources. 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. Provide good ventilation in process area to prevent formation of vapour. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. 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. Use explosion-proof electrical equipment.

Storage conditions : Keep container tightly closed. Keep in a cool place. Store locked up.

Incompatible materials : Oxidizing agent. Moisture. Water :

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

Ethyl silicate (78-10-4)		
Austria	MAK (mg/m <sup>3</sup> )	170 mg/m <sup>3</sup>
Austria	MAK (ppm)	20 ppm
Austria	MAK Short time value (mg/m <sup>3</sup> )	340 mg/m <sup>3</sup>
Austria	MAK Short time value (ppm)	40 ppm
Belgium	Limit value (mg/m <sup>3</sup> )	86 mg/m <sup>3</sup>
Belgium	Limit value (ppm)	10 ppm
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup>
France	VME (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
France	VME (ppm)	10 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	12 mg/m <sup>3</sup>

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Ethyl silicate (78-10-4)		
Germany	TRGS 900 Occupational exposure limit value (ppm)	1.4 ppm
Greece	OEL TWA (mg/m <sup>3</sup> )	170 mg/m <sup>3</sup>
Greece	OEL TWA (ppm)	20 ppm
Greece	OEL STEL (mg/m <sup>3</sup> )	255 mg/m <sup>3</sup>
Greece	OEL STEL (ppm)	30 ppm
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA IDLH	US IDLH (ppm)	700 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	850 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm
Spain	VLA-ED (mg/m <sup>3</sup> )	87 mg/m <sup>3</sup>
Spain	VLA-ED (ppm)	10 ppm
Switzerland	KZGW (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
Switzerland	KZGW (ppm)	10 ppm
Switzerland	MAK (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
Switzerland	MAK (ppm)	10 ppm
Czech Republic	Expoziční limity (PEL) (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
Denmark	Grænseværdie (langvarig) (ppm)	10 ppm
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	86 mg/m <sup>3</sup>
Finland	HTP-arvo (8h) (ppm)	10 ppm
Finland	HTP-arvo (15 min)	170 mg/m <sup>3</sup>
Finland	HTP-arvo (15 min) (ppm)	20 ppm
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (ppm)	10 ppm
Ireland	OEL (15 min ref) (mg/m <sup>3</sup> )	255 mg/m <sup>3</sup>
Ireland	OEL (15 min ref) (ppm)	30 ppm
Norway	Grænseværdier (AN) (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
Norway	Grænseværdier (AN) (ppm)	10 ppm
Norway	Grænseværdier (Korttidsverdi) (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
Norway	Grænseværdier (Korttidsverdi) (ppm)	10 ppm
Poland	NDS (mg/m <sup>3</sup> )	80 mg/m <sup>3</sup>
Romania	OEL TWA (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup>
Romania	OEL STEL (mg/m <sup>3</sup> )	200 mg/m <sup>3</sup>
Canada (Quebec)	VEMP (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
Canada (Quebec)	VEMP (ppm)	10 ppm
Australia	TWA (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
Australia	TWA (ppm)	10 ppm
Portugal	OEL TWA (ppm)	10 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

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### 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 organic vapor (black cartridge) respirator.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: Clear liquid.
Molecular mass	: 650 - 800 g/mol
Colour	: No data available
Odour	: characteristic.
Odour threshold	: No data available
Refractive index	: 1.398
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: < -20 °C
Boiling point	: > 169 °C
Flash point	: 46 °C
Auto-ignition temperature	: 260 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable liquid and vapour.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: 7.2
Relative density	: 1.05 - 1.07
% Volatiles	: < 60 %
Solubility	: Insoluble in water. Reacts with water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 3 - 5 cSt
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 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.

### 10.3. Possibility of hazardous reactions

Material decomposes slowly in contact with moist air or with water liberating ethanol.

### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

### 10.5. Incompatible materials

Oxidizing agent. Moisture. Water :

### 10.6. Hazardous decomposition products

Ethanol. Organic acid vapors. Silicon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

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TETRAETHOXYSILANE, oligomeric hydrolysate (68412-37-3/11099-06-2)	
LD50 oral rat	9280 mg/kg
ATE CLP (oral)	9280 mg/kg bodyweight
Ethyl silicate (78-10-4)	
LD50 oral rat	6270 mg/kg
LDLo inhalation rat	1000 ppm/4h
Tetraethoxysilane, oligomeric hydrolysate, listed under more than one CAS number (68412-37-3/11099-06-2)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 4450 mg/kg

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation. Eye Irritation: eye-hmn, 3000 ppm: severe Irritant
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract. May be harmful if inhaled.
Symptoms/effects after skin contact	: May cause skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.
Chronic symptoms	: On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system.
Reason for classification	: Expert judgment

## SECTION 12: Ecological information

### 12.1. Toxicity

Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

### Tetraethoxysilane, oligomeric hydrolysate, listed under more than one CAS number (68412-37-3/11099-06-2)

EC50 Daphnia 1	> 193 mg/l (Exposure time: 48 h - Species: Daphnia magna)
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### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 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	: Incinerate. 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



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### 14.1. UN number

UN-No. (ADR)	: 1292
UN-No. (IMDG)	: 1292
UN-No. (IATA)	: 1292
UN-No. (ADN)	: 1292
UN-No. (RID)	: 1292

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: TETRAETHYL SILICATE
Proper Shipping Name (IMDG)	: TETRAETHYL SILICATE
Proper Shipping Name (IATA)	: Tetraethyl silicate
Proper Shipping Name (ADN)	: TETRAETHYL SILICATE
Proper Shipping Name (RID)	: TETRAETHYL SILICATE
Transport document description (ADR)	: UN 1292 TETRAETHYL SILICATE, 3, III, (D/E)
Transport document description (IMDG)	: UN 1292 TETRAETHYL SILICATE, 3, III (37°C c.c.)
Transport document description (IATA)	: UN 1292 Tetraethyl silicate, 3, III
Transport document description (ADN)	: UN 1292 TETRAETHYL SILICATE, 3, III
Transport document description (RID)	: UN 1292 TETRAETHYL SILICATE, 3, III

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: 3
Danger labels (ADR)	: 3



#### IMDG

Transport hazard class(es) (IMDG)	: 3
Danger labels (IMDG)	: 3



#### IATA

Transport hazard class(es) (IATA)	: 3
Hazard labels (IATA)	: 3



#### ADN

Transport hazard class(es) (ADN)	: 3
Danger labels (ADN)	: 3



#### RID

Transport hazard class(es) (RID)	: 3
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Danger labels (RID) : 3



### 14.4. Packing group

Packing group (ADR) : III  
Packing group (IMDG) : III  
Packing group (IATA) : III  
Packing group (ADN) : III  
Packing group (RID) : III

### 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) : F1  
Limited quantities (ADR) : 5I  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P001, IBC03, LP01, R001  
Mixed packing provisions (ADR) : MP19  
Portable tank and bulk container instructions (ADR) : T2  
Portable tank and bulk container special provisions (ADR) : TP1  
Tank code (ADR) : LGBF  
Vehicle for tank carriage : FL  
Transport category (ADR) : 3  
Special provisions for carriage - Packages (ADR) : V12  
Special provisions for carriage - Operation (ADR) : S2  
Hazard identification number (Kemler No.) : 30  
Orange plates :



Tunnel restriction code (ADR) : D/E  
EAC code : 3Y

#### - Transport by sea

Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T2  
Tank special provisions (IMDG) : TP1  
EmS-No. (Fire) : F-E  
EmS-No. (Spillage) : S-D  
Stowage category (IMDG) : A  
Flash point (IMDG) : 37°C c.c.  
Properties and observations (IMDG) : Colourless liquid. Flashpoint: 37°C c.c. Explosive limits: 1.3% to 23% Immiscible with water.

#### - Air transport

PCA Excepted quantities (IATA) : E1



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PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
ERG code (IATA)	: 3L

### - Inland waterway transport

Classification code (ADN)	: F1
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 0

### - Rail transport

Classification code (RID)	: F1
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T2
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE4
Hazard identification number (RID)	: 30

### 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

No REACH Annex XVII restrictions

TETRAETHOXYSILANE, oligomeric hydrolysate is not on the REACH Candidate List

TETRAETHOXYSILANE, oligomeric hydrolysate is not on the REACH Annex XIV List

TETRAETHOXYSILANE, oligomeric hydrolysate is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

TETRAETHOXYSILANE, oligomeric hydrolysate is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

% Volatiles : < 60 %

#### 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 : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

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NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

### Denmark

Class for fire hazard : Class II-1

Store unit : 5 liter

Classification remarks : R10 <H226;H319;H335>; 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

### 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. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

SDS EU (REACH Annex II) - Custom

*The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.*

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