

**TETRAMETHOXYSilANE, 98%**

Safety Data Sheet SIT7510.0

Date of issue: 03/02/2015

Revision date: 03/09/2019

Version: 2.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form	: Substance
Physical state	: Liquid
Substance name	: TETRAMETHOXYSilANE, 98%
Product code	: SIT7510.0
Formula	: C ₄ H ₁₂ O ₄ Si
Synonyms	: TMOS SILICON TETRAMETHOXIDE TETRAMETHYLORTHOsilICATE
Chemical family	: ORGANOMETHOXYsilANE

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 - 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 - 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 2	H225
Acute toxicity (oral), Category 3	H301
Acute toxicity (dermal), Category 3	H311
Acute toxicity (inhalation:vapour) Category 1	H330
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
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

TETRAMETHOXYSILANE, 98%

Safety Data Sheet

2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour.
H301+H311 - Toxic if swallowed or in contact with skin
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H330 - Fatal if inhaled.
H335 - May cause respiratory irritation.

Precautionary statements (CLP) :

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P284 - Wear respiratory 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.
P310 - Immediately call a POISON CENTER or doctor/physician

2.3. Other hazards

Other hazards not contributing to the classification

: Additional methanol may be formed by reaction with moisture and water.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type

: Mono-constituent

Name

: TETRAMETHOXYSILANE, 98%

CAS-No.

: 681-84-5

EC-No.

: 211-656-4

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tetramethoxysilane	(CAS-No.) 681-84-5 (EC-No.) 211-656-4	98 - 100	Flam. Liq. 2, H225 Acute Tox. 1 (Inhalation:vapour), H330 Skin Irrit. 2, H315 Eye Dam. 1, H318 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.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

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.

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 after inhalation

: Fatal if inhaled. May cause respiratory irritation. Pulmonary oedema. Cough. Shortness of breath.

Symptoms/effects after skin contact

: Causes skin irritation.

TETRAMETHOXYSILANE, 98%

Safety Data Sheet

Symptoms/effects after eye contact	: Causes serious eye damage. Even mild exposures can cause conjunctivitis and corneal scarring. Initial symptoms of exposure may include a "scratchy" feeling in the eyes. Silicon tetramethoxide causes severe eye injuries, as well as necrosis of corneal cells, which can progress long after exposure has ceased. These destructive effects resist treatment and permanent blindness is possible from exposure.
Symptoms/effects after ingestion	: Oral toxicity is associated with methanol, the solvent and a hydrolysis product which causes nausea, vomiting, headache, visual effects including blindness.
Chronic symptoms	: On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system. Methanol may affect 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: This product reacts with water in the acid contents of the stomach to form methanol. 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

Suitable extinguishing media	: Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapour. Vapors of tetramethoxysilane cause corneal injury and blindness on even short exposures. 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	: Fire fighters must wear positive pressure self-contained breathing apparatus. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid exposure of eyes to vapors.
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	: Provide ventilation system and use necessary personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION". Take up liquid spill into inert absorbent material, e.g.: sand/earth.

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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Handle in an enclosing hood with exhaust ventilation. Open carefully. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Avoid all eye and skin contact and do not breathe vapour and mist.

TETRAMETHOXSILANE, 98%

Safety Data Sheet

Hygiene measures : Wash hands thoroughly after handling. 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 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

TETRAMETHOXSILANE, 98% (681-84-5)		
Australia	TWA (mg/m ³)	6 mg/m ³
Australia	TWA (ppm)	1 ppm
Tetramethoxysilane (681-84-5)		
Austria	MAK (mg/m ³)	6 mg/m ³
Austria	MAK (ppm)	1 ppm
Austria	MAK Short time value (mg/m ³)	12 mg/m ³
Austria	MAK Short time value (ppm)	2 ppm
Belgium	Limit value (mg/m ³)	6 mg/m ³
Belgium	Limit value (ppm)	1 ppm
France	VME (mg/m ³)	6 mg/m ³
France	VME (ppm)	1 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	2 mg/m ³
Germany	TRGS 900 Occupational exposure limit value (ppm)	0.3 ppm
Greece	OEL TWA (mg/m ³)	6 mg/m ³
Greece	OEL TWA (ppm)	1 ppm
Greece	OEL STEL (mg/m ³)	30 mg/m ³
Greece	OEL STEL (ppm)	5 ppm
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	6 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	1 ppm
Spain	VLA-ED (mg/m ³)	6.3 mg/m ³
Spain	VLA-ED (ppm)	1 ppm
Switzerland	MAK (mg/m ³)	6 mg/m ³
Switzerland	MAK (ppm)	1 ppm
Finland	HTP-arvo (8h) (mg/m ³)	32 mg/m ³
Finland	HTP-arvo (8h) (ppm)	5 ppm
Finland	HTP-arvo (15 min)	63 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	10 ppm
Ireland	OEL (8 hours ref) (mg/m ³)	6 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	1 ppm
Ireland	OEL (15 min ref) (mg/m ³)	30 mg/m ³
Ireland	OEL (15 min ref) (ppm)	5 ppm
Norway	Grenseverdier (AN) (mg/m ³)	6 mg/m ³
Norway	Grenseverdier (AN) (ppm)	1 ppm
Norway	Grenseverdier (Korttidsverdi) (mg/m ³)	6 mg/m ³
Norway	Grenseverdier (Korttidsverdi) (ppm)	1 ppm
Canada (Quebec)	VEMP (mg/m ³)	6 mg/m ³
Canada (Quebec)	VEMP (ppm)	1 ppm
Australia	TWA (mg/m ³)	6 mg/m ³
Australia	TWA (ppm)	1 ppm
Portugal	OEL TWA (ppm)	1 ppm

TETRAMETHOXYSILANE, 98%

Safety Data Sheet

8.2. Exposure controls

Appropriate engineering controls:

Handle in an enclosing hood with exhaust ventilation. Local exhaust is needed at source of vapours.

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 worker's goggles must be worn. Safety glasses are not adequate eye protection. Contact lenses should not be worn

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. NIOSH-certified full-face supplied air respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear liquid.
Molecular mass	: 152.22 g/mol
Colour	: No data available
Odour	: characteristic. Slight. Antiseptic.
Odour threshold	: No data available
Refractive index	: 1.3688
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 4 - 5 °C
Freezing point	: No data available
Boiling point	: 121 - 122 °C
Flash point	: 20 °C
Auto-ignition temperature	: 245 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapour.
Vapour pressure	: 12 mm Hg @ 25°C
Relative vapour density at 20 °C	: 5.25
Relative density	: 1.032
% Volatiles	: 100 %
Solubility	: Reacts with water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 0.5 cSt
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 0.88 - 23.8 vol %

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.

TETRAMETHOXYSilANE, 98%

Safety Data Sheet

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Oxidizing agent. Moisture. Water.

10.6. Hazardous decomposition products

Methanol. Organic acid vapors. Silicon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Toxic if swallowed. Toxic in contact with skin. Fatal if inhaled.

TETRAMETHOXYSilANE, 98% (681-84-5)

ATE CLP (oral)	100 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
ATE CLP (vapours)	0.409 mg/l/4h

Tetramethoxysilane (681-84-5)

LD50 dermal rabbit	17 ml/kg
LC50 inhalation rat (mg/l)	0.393 mg/l/4h
LDLo oral rat	700 mg/kg
LCLo inhalation rat	250 ppm/4h
LCLo inhalation mouse	1000 mg/m ³ /10M
ATE CLP (vapours)	0.393 mg/l/4h
ATE CLP (dust,mist)	0.393 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage. Severe eye injury and permanent blindness have been reported for humans. Eye Irritation - rabbit: 250 mg: Severe Irritant
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified None of the components in this product at concentrations >0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation. Under experimental conditions, the kidney was found to be the target organ. Overexposure can cause lung damage - pulmonary toxin.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: Fatal if inhaled. May cause respiratory irritation. Pulmonary oedema. Cough. Shortness of breath.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage. Even mild exposures can cause conjunctivitis and corneal scarring. Initial symptoms of exposure may include a "scratchy" feeling in the eyes. Silicon tetramethoxide causes severe eye injuries, as well as necrosis of corneal cells, which can progress long after exposure has ceased. These destructive effects resist treatment and permanent blindness is possible from exposure.
Symptoms/effects after ingestion	: Oral toxicity is associated with methanol, the solvent and a hydrolysis product which causes nausea, vomiting, headache, visual effects including blindness.
Chronic symptoms	: On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system. Methanol may effect the central nervous system resulting in persistent or recurring headaches or impaired vision.
Reason for classification	: RTECS Number: VV9800000

SECTION 12: Ecological information

12.1. Toxicity

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

TETRAMETHOXYSILANE, 98%

Safety Data Sheet

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 : May be hazardous to aquatic life if released to open waters.

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) : 2606
UN-No. (IMDG) : 2606
UN-No. (IATA) : 2606
UN-No. (ADN) : 2606
UN-No. (RID) : 2606

14.2. UN proper shipping name

Proper Shipping Name (ADR) : METHYL ORTHOSILICATE
Proper Shipping Name (IMDG) : METHYL ORTHOSILICATE
Proper Shipping Name (IATA) : Methyl orthosilicate
Proper Shipping Name (ADN) : METHYL ORTHOSILICATE
Proper Shipping Name (RID) : METHYL ORTHOSILICATE
Transport document description (ADR) : UN 2606 METHYL ORTHOSILICATE, 6.1 (3), I, (C/D)
Transport document description (IMDG) : UN 2606 METHYL ORTHOSILICATE, 6.1 (3), I (-18°C c.c.)
Transport document description (IATA) : UN 2606 Methyl orthosilicate, 6.1
Transport document description (ADN) : UN 2606 METHYL ORTHOSILICATE, 6.1 (3), I
Transport document description (RID) : UN 2606 METHYL ORTHOSILICATE, 6.1 (3), I

14.3. Transport hazard class(es)

ADR

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



IMDG

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

TETRAMETHOXYSILANE, 98%

Safety Data Sheet



IATA

Transport hazard class(es) (IATA) : 6.1 (3)

ADN

Transport hazard class(es) (ADN) : 6.1 (3)

Danger labels (ADN) : 6.1, 3



RID

Transport hazard class(es) (RID) : 6.1 (3)

Danger labels (RID) : 6.1, 3



14.4. Packing group

Packing group (ADR) : I
Packing group (IMDG) : I
Packing group (IATA) : Not applicable
Packing group (ADN) : I
Packing group (RID) : I

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) : TF1
Special provisions (ADR) : 354
Limited quantities (ADR) : 0
Excepted quantities (ADR) : E0
Packing instructions (ADR) : P602
Mixed packing provisions (ADR) : MP8, MP17
Portable tank and bulk container instructions (ADR) : T20
Portable tank and bulk container special provisions (ADR) : TP2, TP37
Tank code (ADR) : L10CH
Tank special provisions (ADR) : TU14, TU15, TE19, TE21
Vehicle for tank carriage : FL
Transport category (ADR) : 1
Special provisions for carriage - Loading, unloading and handling (ADR) : CV1, CV13, CV28
Special provisions for carriage - Operation (ADR) : S2, S9, S14

TETRAMETHOXYSILANE, 98%

Safety Data Sheet

Hazard identification number (Kemler No.) : 663

Orange plates :

663

2606

Tunnel restriction code (ADR) : C/D

EAC code : 3WE

APP code : A(fl)

- Transport by sea

Special provisions (IMDG) : 354

Limited quantities (IMDG) : 0

Excepted quantities (IMDG) : E0

Packing instructions (IMDG) : P602

Tank instructions (IMDG) : T20

Tank special provisions (IMDG) : TP2, TP13, TP37

EmS-No. (Fire) : F-E

EmS-No. (Spillage) : S-D

Stowage category (IMDG) : D

Stowage and handling (IMDG) : SW2

Flash point (IMDG) : -18°C to 19°C c.c.

Properties and observations (IMDG) : Colourless, flammable liquid with an ethereal odour. Immiscible with water. Flashpoint: -18°C to 19°C c.c. Highly toxic if swallowed, by skin contact or by inhalation. May cause blindness.

- Air transport

PCA Limited quantities (IATA) : Forbidden

PCA limited quantity max net quantity (IATA) : Forbidden

PCA packing instructions (IATA) : Forbidden

PCA max net quantity (IATA) : Forbidden

CAO packing instructions (IATA) : Forbidden

CAO max net quantity (IATA) : Forbidden

ERG code (IATA) : 6F

- Inland waterway transport

Classification code (ADN) : TF1

Special provisions (ADN) : 354, 802

Limited quantities (ADN) : 0

Excepted quantities (ADN) : E0

Equipment required (ADN) : PP, EP, EX, TOX, A

Ventilation (ADN) : VE01, VE02

Number of blue cones/lights (ADN) : 2

- Rail transport

Classification code (RID) : TF1

Special provisions (RID) : 354

Limited quantities (RID) : 0

Excepted quantities (RID) : E0

Packing instructions (RID) : P602

Mixed packing provisions (RID) : MP8, MP17

Portable tank and bulk container instructions (RID) : T20

Portable tank and bulk container special provisions (RID) : TP2, TP37

Tank codes for RID tanks (RID) : L10CH

Special provisions for RID tanks (RID) : TU14, TU15, TU38, TE21, TE22

Transport category (RID) : 1

Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31

Hazard identification number (RID) : 663

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

TETRAMETHOXYSILANE, 98%

Safety Data Sheet

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

TETRAMETHOXYSILANE, 98% is not on the REACH Candidate List

TETRAMETHOXYSILANE, 98% is not on the REACH Annex XIV List

TETRAMETHOXYSILANE, 98% 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.

TETRAMETHOXYSILANE, 98% 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 : 100 %

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

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 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. 1 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 1
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.

TETRAMETHOXYSILANE, 98%

Safety Data Sheet

H311	Toxic in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H330	Fatal 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.

© 2019 Gelest Inc. Morrisville, PA 19067

