

Safety Data Sheet SIT8572.7 Date of issue: 02/18/2016 Version: 1.0

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

Product identifier

Product form : Substance Physical state : Liquid

Substance name : TRIMETHYLSILOXYTRIETHOXYSILANE

Product code : SIT8572.7 Formula C9H24O4Si2

1,1,1-TRIETHOXY-3,3,3-TRIMETHYLDISILOXANE; 1,1,1-TRIMETHYL-3,3,3-Synonyms

TRIETHOXYDISILOXANE

: ORGANOETHOXYSILANE Chemical family

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

Use of the substance/mixture : Chemical intermediate

For research use only

Details of the supplier of the safety data sheet 1.3.

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

Emergency telephone number

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

SECTION 2: Hazards identification

Classification of the substance or mixture 2.1.

GHS-US classification

Eye Irrit. 2A H319

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H319 - Causes serious eye irritation

Precautionary statements (GHS-US) P280 - Wear protective gloves/protective clothing/eye protection/face protection

P264 - Wash hands thoroughly after handling

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P337+P313 - If eye irritation persists: Get medical advice/attention

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.

Unknown acute toxicity (GHS US)

No data available

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SECTION 3: Composition/Information on ingredients

3.1. **Substance**

Substance type : Mono-constituent

TRIMETHYLSILOXYTRIETHOXYSILANE Name

CAS No 17861-35-7

Name	Product identifier	%	GHS-US classification
Trimethylsiloxytriethoxysilane	(CAS No) 17861-35-7	95 -	Flam. Liq. 4, H227
		100	Eye Irrit. 2A, H319

Mixture

Not applicable

SECTION 4: First aid measures

Description of first aid measures

Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek First-aid measures general

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 victim to fresh air and keep at rest in a position comfortable for breathing. If you feel

unwell, seek medical advice.

First-aid measures after skin contact Wash with plenty of soap and 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/injuries after inhalation : May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact May cause skin irritation. Symptoms/injuries after eye contact Causes serious eye irritation. Symptoms/injuries after ingestion May be harmful if swallowed.

Chronic symptoms On contact with water this compound liberates ethanol 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

NOTE TO PHYSICIAN: This product reacts with water in the acid contents of the stomach to form ethanol.

SECTION 5: Firefighting measures

Extinguishing media

: Water spray. Foam. Carbon dioxide. Dry chemical. Suitable extinguishing media

Unsuitable extinguishing media : Do not use straight streams.

5.2 Special hazards arising from the substance or mixture

: Irritating fumes and organic acid vapors may develop when material is exposed to elevated Fire hazard

temperatures or open flame.

Advice for firefighters 5.3.

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

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

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

For non-emergency personnel

: Wear protective equipment as described in Section 8. Protective equipment

: Evacuate unnecessary personnel. **Emergency procedures**

For emergency responders 6.1.2.

: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with Protective equipment

proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

Environmental precautions 6.2.

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

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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 : Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapor and mist. Provide good ventilation in

process area to prevent accumulation of vapors. Ground/bond container and receiving

equipment. Use only non-sparking tools.

Hygiene measures : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

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

Incompatible materials : 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

No additional information available

8.2. Exposure controls

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

Personal protective equipment : Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be

available in the immediate vicinity of any potential exposure.

Hand protection : Neoprene or nitrile rubber gloves.

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

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended. NIOSH-certified 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 : 252.46 g/mol
Color : No data available
Odor threshold : No data available

Refractive index : 1.3866

pH : No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available

Freezing point : < 0 °C

Boiling point : $62 \, ^{\circ}\text{C} \, @ \, 9 \, \text{mm Hg}$

Flash point : $> 65 \, ^{\circ}\text{C}$

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Combustible liquid
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available

Relative density : 0.897

Solubility : Insoluble in water. Reacts with water.

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Log Pow : No data available : No data available Log Kow Viscosity, kinematic : No data available Viscosity, dynamic No data available Explosive properties No data available Oxidizing properties : No data available **Explosion limits** : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity

No additional information available

Chemical stability 10.2.

Stable in sealed containers.

Possibility of hazardous reactions

Reacts with water and moisture in air, liberating ethanol.

Conditions to avoid

Heat. Open flame. Sparks.

Incompatible materials 10.5.

Moisture. Water.

10.6. **Hazardous decomposition products**

Ethanol. Organic acid vapors.

SECTION 11: Toxicological information

Information on toxicological effects 11.1.

Acute toxicity : Not classified Not classified Skin corrosion/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory or skin sensitization Not classified Germ cell mutagenicity Not classified Not classified Carcinogenicity Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated : Not classified exposure)

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

This compound liberates ethanol on contact with moisture. Material generates ethanol on contact with water or moisture in skin, eyes and mucous membranes and has an irritating,

dehydrating effect on overexposed tissue.

Symptoms/injuries after inhalation : May cause irritation to the respiratory tract.

May cause skin irritation. Symptoms/injuries after skin contact Symptoms/injuries after eye contact Causes serious eye irritation. Symptoms/injuries after ingestion May be harmful if swallowed.

Chronic symptoms On contact with water this compound liberates ethanol 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**

No additional information available

Persistence and degradability

No additional information available

Bioaccumulative potential

No additional information available

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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

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

Effect on ozone layer : No additional information available

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to ..

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

14.1. UN number

DOT NA no. NA1993

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Combustible liquid, n.o.s.

(TRIMETHYLSILOXYTRIETHOXYSILANE)

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

DOT Symbols : D - Proper shipping name for domestic use only, or to and from Canada,G - Identifies PSN

requiring a technical name

Packing group (DOT) : III - Minor Danger

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241

14.3. Additional information

Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

Special transport precautions : This product is Combustible as defined by the US Department of Transportation (DOT). It is

regulated for transport in the US in container > 119 gallons. The product is not regulated for

transport by the IATA, ADR/RID, ADNR or the IMDG regulations.

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

SECTION 15: Regulatory information

15.1. US Federal regulations

TRIMETHYLSILOXYTRIETHOXYSILANE (17861-35-7)

TSCA Exemption/Exclusion

CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the

exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is not permitted in the United States.

is not permitted in the United States

Trimethylsiloxytriethoxysilane (17861-35-7)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

No additional information available

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15.3. US State regulations

TRIMETHYLSILOXYTRIETHOXYSILANE(17861-35-7)		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	
Trimethylsiloxytriethoxysilane (17861-35-7)		

U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
No	No	No	No	

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; or oC 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.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development.

Full text of H-phrases::

H227	Combustible liquid
H319	Causes serious eye irritation

HMIS III Rating

Health 2 Moderate Hazard - Temporary or minor injury may occur

2 Moderate Hazard Flammability Physical : 1 Slight Hazard

Prepared by safety and environmental affairs.

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SDS US (GHS HazCom 2012) - Custom

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

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