

# **SAFETY DATA SHEET**

Creation Date 20-Jul-2009 Revision Date 13-May-2022 Revision Number 3

1. Identification

Product Name Triethylsilane

Cat No. : A10320

**CAS No** 617-86-7

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

# Details of the supplier of the safety data sheet

#### Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

#### **Emergency Telephone Number**

During normal business hours (Monday-Friday, 8am-7pm EST), call (800)

343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

# 2. Hazard(s) identification

## Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 2

#### Label Elements

## Signal Word

Danger

#### **Hazard Statements**

Highly flammable liquid and vapor

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# **Precautionary Statements**

#### Prevention

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

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

**Storage** 

Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

# 3. Composition/Information on Ingredients

Component	CAS No	Weight %
Silane, triethyl-	617-86-7	99

## 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and

effects

None reasonably foreseeable. Inhalation of high vapor concentrations may cause

symptoms like headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may

be used to cool closed containers.

**Triethylsilane** 

Unsuitable Extinguishing Media No information available

-3 °C / 26.6 °F **Flash Point** 

Method -No information available

**Autoignition Temperature** 245 °C / 473 °F

**Explosion Limits** 

Upper No data available Lower No data available Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

## **Specific Hazards Arising from the Chemical**

Flammable. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air. Do not allow run-off from fire-fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO2). Silicon dioxide. Hydrogen.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
2	3	1	N/A

#### Accidental release measures

**Personal Precautions** 

Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** 

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods for Containment and Clean Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Up

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Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

Storage.

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Incompatible Materials. Acids. Bases. Strong oxidizing agents.

# 8. Exposure controls / personal protection

**Exposure Guidelines** 

This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

### **Engineering Measures**

Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

**Triethylsilane** 

#### **Personal Protective Equipment**

**Eye/face Protection** Tight sealing safety goggles. Face protection shield.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

> EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

**Physical State** Liquid **Appearance** Colorless Odor aromatic

**Odor Threshold** No information available Not applicable 0.3 g/L (20°C) Ha

Melting Point/Range No data available

**Boiling Point/Range** 107 - 108 °C / 224.6 - 226.4 °F @ 760 mmHg

-3 °C / 26.6 °F **Flash Point** No information available **Evaporation Rate** 

Flammability (solid,gas) Not applicable

Flammability or explosive limits

Upper No data available Lower No data available **Vapor Pressure** 31 hPa (20°C)

**Vapor Density** No information available

**Specific Gravity** 0.720

Solubility Decomposes in contact with water

Partition coefficient; n-octanol/water No data available **Autoignition Temperature** 245 °C / 473 °F No information available **Decomposition Temperature** Viscosity No information available

Molecular Formula C6 H16 Si **Molecular Weight** 116.28

#### 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

Stability Stable under normal conditions. Decomposes in contact with water.

**Conditions to Avoid** Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

**Incompatible Materials** Acids, Bases, Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Silicon dioxide, Hydrogen

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

Revision Date 13-May-2022 **Triethylsilane** 

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Silane, triethyl-	>2000 mg/kg (Rat)	Not listed	Not listed

**Toxicologically Synergistic** 

**Products** 

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes, respiratory system and skin

No information available Sensitization

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Silane, triethyl-	617-86-7	Not listed				

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

**Aspiration hazard** No information available

delayed

Symptoms / effects.both acute and Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

tiredness, nausea and vomiting

**Endocrine Disruptor Information** No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

# 12. Ecological information

#### **Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment. Reacts with water so no ecotoxicity data for the substance is available.

Persistence and Degradability Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment.

	Component	log Pow
ı	Silane, triethyl-	3.64

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

DOT

**UN-No** UN1993

Flammable liquid, n.o.s. **Proper Shipping Name Technical Name** (TRIETHYLSILANE)

**Triethylsilane** 

**Hazard Class** 3 **Packing Group** Ш

TDG

UN1993 **UN-No** 

**Proper Shipping Name** Flammable liquid, n.o.s. **Technical Name** (TRIETHYLSILANE)

**Hazard Class Packing Group** Ш

IATA

UN1993 **UN-No** 

**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.\* 3

**Hazard Class Packing Group** Ш

IMDG/IMO

**UN-No** UN1993

**Proper Shipping Name** Flammable liquid, n.o.s.

**Hazard Class Packing Group** Ш

# 15. Regulatory information

#### **United States of America Inventory**

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags	
Silane, triethyl-	617-86-7	X	ACTIVE	-	

#### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical

Not applicable Substances & Mixtures, Under TSCA Section 6(h) (PBT)

TSCA 12(b) - Notices of Export Not applicable

#### **International Inventories**

China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Taiwan (TCSI), Japan (ISHL), New Zealand (NZIoC), Japan (ISHL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Silane, triethyl-	617-86-7	-	Х	210-535-3	Х	-	Х	Х	Х	KE-34232

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### U.S. Federal Regulations

Not applicable **SARA 313** 

See section 2 for more information SARA 311/312 Hazard Categories

**CWA (Clean Water Act)** Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and

Health Administration

Not applicable

**CERCLA** Not applicable

**Triethylsilane** 

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**California Proposition 65** This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

**U.S. Department of Transportation** 

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Serious risk, Grade 3

Authorisation/Restrictions according to EU REACH Not applicable

	Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	J	Candidate List of	
				Substances	Substances of Very High Concern (SVHC)	
1	Silane, triethyl-	617-86-7	-	-	-	

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Silane, triethyl-	617-86-7	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)

		(2012/18/EC) -	(2012/18/EC) -	Convention (PIC)	(Hazardous Waste)
		Qualifying Quantities	Qualifying Quantities		
		for Major Accident	for Safety Report		
		Notification	Requirements		
Silane, triethyl-	617-86-7	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Health, Safety and Environmental Department

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 20-Jul-2009

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 13-May-2022

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 13-May-2022

**Revision Summary** SDS authoring systems update, replaces ChemGes SDS No. 617-86-7.

#### **Disclaimer**

The information provided in this Safety Data Sheet 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 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 materials or in any process, unless specified in the text

# **End of SDS**

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