

# Ethyl Silicate

# SDS

## SAFETY DATA SHEET

according to GHS(fifth revised edition)

### Section 1 - Product and Company Identification

<b>Product name</b>	Ethyl Silicate
<b>CAS No.</b>	78-10-4
<b>Supplier</b>	Zhangjiagang Fortune Chemical Co., Ltd
<b>Address</b>	Rm 1907, Bldg #2, Oriental New Plaza, Zhangjiagang City, Jiangsu Province, China
<b>Post code</b>	215600
<b>Fax</b>	+86-512-58960306
<b>Emergency number</b>	+86-512-58740306
<b>Effective date</b>	Jan 14, 2016

### Section 2 –Hazards Identification

**Hazard class and label elements of the substance according to GHS(the fifth revised edition):**

**GHS hazard class**

<b>Physical hazard</b>	Flammable liquids	category3
<b>Health hazards</b>	Serious eye damage/eye irritation	category2A
	Specific target organ toxicity, single exposure; Respiratory tract irritation	category3

**Pictogram**



<b>Signal</b>	Warning
<b>Hazard statements</b>	H226 Flammable liquid and vapour H319 Causes serious eye irritation H335 May cause respiratory irritation
<b>Precautionary</b>	<b>Statements</b>
<b>Prevention</b>	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

	P233 Keep container tightly closed.
	P240 Ground and bond container and receiving equipment.
	P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
	P242 Use non-sparking tools.
	P243 Take action to prevent static discharges.
	P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264 Wash thoroughly after handling.
	P271 Use only outdoors or in a well-ventilated area.
	P280 Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312 Call a POISON CENTER/doctor/if you feel unwell.
	P337+P313 If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	P403+P233 Store in a well-ventilated place. Keep container tightly closed.
	P403+P235 Store in a well-ventilated place. Keep cool.
	P405 Store locked up.
<b>Disposal</b>	P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Section 3 – Composition/Information on Ingredients

Component	Concentration(%)	CAS No.	EC No.
Ethyl Silicate	10-15%	78-10-4	201-083-8
Polyethyl silicate	85-90%	—	—

### Section 4 – First Aid Measures

**After skin contact** Take off the contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**After eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**After ingestion** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**After inhalation** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### Section 5 – Fire Fighting Measures

<b>Hazardous products of combustion</b>	Carbon oxides, silicon oxides
<b>Extinguishing method</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Special protective equipment</b>	Wear self contained breathing apparatus for fire fighting if necessary.

## Section 6 – Accidental Release Measure

<b>Personal protective measures</b>	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
<b>Environmental protective measures</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
<b>Methods for taking in and cleaning up</b>	Pick up and arrange disposal. Keep in suitable, closed containers for disposal.

## Section 7 – Handling and Storage

<b>Handling</b>	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
<b>Storage</b>	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## Section 8 – Exposure Controls/Personal Protection

<b>Engineering Controls</b>	Safety shower and eye bath. Mechanical exhaust required.
<b>Respiratory protection</b>	Use a full-face supplied air respirator.
<b>Eye protection</b>	Wear chemical goggles.
<b>Hand Protection</b>	Wear impervious chemical resistant gloves.
<b>Body protection</b>	Protective work clothing.

## Section 9 – Physical and Chemical Properties

<b>Appearance and properties:</b> Colorless transparent liquid	<b>Odor:</b> No data available
<b>Odor threshold:</b> No data available	<b>pH value:</b> No data available
<b>Melting point/freezing point( °C):</b> No data available	<b>Initial boiling point and boiling range( °C):</b> No data available
<b>Flash point( °C)(closed cup):</b> 34.7	<b>Evaporation Rate:</b> No data available
<b>Flammability:</b> No data available	<b>Upper explosive limit%(V/V):</b> No data available
<b>Lower explosive limit%(V/V):</b> No data available	<b>Vapor pressure(MPa):</b> No data available
<b>Vapor density(g/mL):</b> No data available	<b>Relative density(g/cm<sup>3</sup>):</b> 1.05
<b>Solubility:</b> No data available	<b>Octanol / water partition coefficient:</b> No data available
<b>Auto-ignition temperature( °C):</b> No data available	<b>Decomposition temperature( °C):</b> No data available
<b>Kinematic viscosity (mm<sup>2</sup>/s):</b> No data available	

## Section 10 – Stability and Reactivity

<b>Reactive</b>	No data available
<b>Chemical stability</b>	Stable under the condition recommended.
<b>Possibility of hazardous reactions</b>	No data available
<b>Avoid conditions</b>	Heat, flames and sparks.

**Incompatible materials** Strong oxidizing agents, Strong acids

**Hazardous decomposition products** No data available

## Section 11 – Toxicological Information

**Acute toxicity:**

Ethyl Silicate: LD<sub>50</sub>(rat,Oral) 6270mL/kg;LD<sub>50</sub>(rabbit,Dermal)5880 mg/kg

**Skin corrosion/irritation:** No data available

**Serious eye damage/eye irritation:** No data available

**Respiratory or skin sensitization:** No data available.

**Germ cell mutagenicity:** No data available

**Carcinogenicity:** Ethyl Silicate (CAS No. 78-10-4) : No data available;

Polyethyl silicate (CAS No. —) : No data available

**Reproductive toxicity:** No data available

**Specific target organ toxicity – single exposure:** No data available

**Specific target organ toxicity – repeated exposure:** No data available

**Aspiration hazard:** No data available

## Section 12 – Ecological Information

**Toxicity:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Other adverse effects:** No data available.

## Section 13 – Disposal Considerations

**Property of waste:** No data available

**Methods of disposal:** Dispose of in a manner consistent with federal, state, and local regulations.

**Precautions of disposal:** Professional processing together

## Section 14 - Transport Information

**UN number:** 3272

**UN proper shipping name:** ESTERS, N.O.S.

**Transportation primary hazard class:** 3

**Transportation secondary hazard class:** —

**Packing group:** III

## Section 15 - Regulatory Information

Component	CHINA	TSCA	ENCS	EINECS
Ethyl Silicate	√	√	√	√
Polyethyl silicate	-	-	-	-

**Note 1:**

**CHINA - China Inventory of Existing Chemical Substances (IECSC)**

**TSCA - United States Inventory of Toxic Substances Control Act Chemical Substances (TSCA)**

**ENCS - Japan Existing and New Chemical Substances (ENCS)**

EINECS - European Inventory of Existing Commercial Chemical Substances (EINECS)

Note 2:

"√" Indicates that the substance included in the regulations

"-" That no data or included in the regulations

## Section 16 - Additional Information

**Other information:** This Safety Data Sheet (SDS) was prepared according to UN GHS (the fifth revised edition) and the information included is based on the present state of our knowledge. However, the information is provided without any warranty, express or implied, regarding its correctness and is only for users reference. Users should make their independent judgment of suitability of these information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.