

# Safety Data Sheet

According to GB/T 16483-2008 and GB/T 17519-2013

Triethylene glycol monomethyl ether, borate



Version 1.0

Issue date: 09/07/2021

Revision date: 09/07/2021

SDS Record Number: CSSS-TCO-010-119296

## 1. Chemical Product and Company Identification

### 1.1 Product identifier

**Chemical name:** Triethylene glycol monomethyl ether, borate  
**Additional identification:** Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-, triester with boric  
(Triethylene glycol monomethyl ether, borate)

**Product Code:** -

**Identification of the product:** CAS# 30989-05-0 EC# 250-418-4

### 1.2 Relevant identified uses of the substance and uses advised against

**1.2.1 Identified uses:** For the production of brake fluid, hydraulic fluid, thermal fluid and lubricants.

**1.2.2 Uses advised against:** Not available

### 1.3 Details of the supplier of the safety data sheet

**Supplier(Manufacturer):** Jiangsu Yida Chemical Co., Ltd./Jilin Yida Chemical Co. LTD

**Address:** No.1 Qiuzhuang, Xishiqiao, Jiangyin, Jiangsu,P.R.China/  
346 Kunlun Street, Jilin Economic and Technological Development Zone, Jilin City, Jilin  
Province, China

**Contact person(E-mail):** Panyan2011@aliyun.com

**Telephone:** 0510-86608770

**Fax:** 0510-86608528

**1.4 Emergency telephone Number(24h):** 0510-86609119

## 2. Hazards Identification

**Emergency Overview:** Light yellow transparent liquid. Combustion produces carbon oxides.

### 2.1 Classification of the substance/mixture

#### 2.1.1 GHS Classification:

<b>Physical hazards</b>	Not classified
<b>Health hazards</b>	Not classified
<b>Environmental hazards</b>	Not classified

### 2.2 Label elements

**Symbols:** No hazard pictogram is used.

**Signal Word(S):** No signal word is used.

**Hazard Statement:** Not applicable.

#### Precautionary statement

**Prevention:** Not applicable.

**Response:** Not applicable.

**Storage:** Not applicable.

**Disposal:** Not applicable.

**Physical and chemical hazards:** Not applicable.

**Health hazards:** Not applicable.

**Environmental hazards:** Not applicable.

## 3. Composition Information on Ingredients

Product name: Triethylene glycol monomethyl ether, borate

Version #:1.0 Issue date: 09-07-2021. Revision date: 09-07-2021.

SDS CHINA

1/6

**Substance/Mixture:** Substance

**Ingredient(s):**

Chemical Name	CAS No.	Concentration
Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-, triester with boric (Triethylene glycol monomethyl ether, borate)	30989-05-0	≥99%
Triethylene glycol monomethyl ether	112-35-6	

## 4. First Aid Measures

### 4.1 Description of first aid measures

<b>In case of inhalation:</b>	Move to fresh air. Keep the airway open. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<b>In case of skin contact:</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
<b>In case of eyes contact:</b>	Filed eyelid, and immediately flush with plenty of water for at least 15 minutes. Get medical attention.
<b>In case of ingestion:</b>	Drink enough warm water, induce vomiting. Get medical attention.
<b>4.2 Most important symptoms and effects, both acute and delayed:</b>	The product is not classified as harmful to human health effect.

<b>4.3 To protect playing rescuer advice and the special hints to the doctor:</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
<b>4.4 Indication of any immediate medical attention and special treatment needed:</b>	Providing general supportive measures and treating symptomatically. Event shortness of breath, give oxygen. Keep the victim warm. Observation of the patient. Symptoms may be delayed occur.

## 5. Fire-fighting Measures

<b>5.1 Suitable extinguishing media:</b>	Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam.
<b>Unsuitable extinguishing media:</b>	Do not use direct water stream. May spread fire.
<b>5.2 Special hazards arising from the chemical:</b>	Combustion produces carbon oxides.
<b>5.3 Special fire fighting methods and special protective actions for fire-fighters:</b>	Full protective clothing and self-contained breathing apparatus. Contaminated extinguishing water must be disposed off in accordance with official regulations. Use water spray to keep fire-exposed containers cool.

## 6. Accidental Release Measures

<b>6.1 Personal precautions, protective equipment and emergency procedures:</b>	Evacuate all non-essential personnel. Avoid eye and skin contact. Wear appropriate protective clothing. Ventilate area.
<b>6.2 Environmental precautions:</b>	Do not let product enter drains.
<b>6.3 Methods and materials for containment and cleaning up:</b>	For Small Spills: Absorb spill with sand, vermiculite or other inert material. For Large Spills: Dike or trenching asylum. Transferred to tankers or exclusive collector with pumps, for recycling or shipped to the waste disposal sites.
<b>6.4 Precautions to prevent the occurrence of</b>	Clean up spills immediately to prevent leaks again.

secondary hazards:

## 7. Handling and Storage

### 7.1 Safe handling

<b>Technical measures:</b>	No specific recommendations.
<b>Local and general ventilation:</b>	Provide adequate ventilation.
<b>Precautions:</b>	Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling.
<b>Safe handling advice:</b>	Use personal protection recommended in Section 8 of the SDS.

### 7.2 Storage

<b>Technical measures:</b>	No specific recommendations.
<b>Suitable storage conditions:</b>	Store in a dry place. Store indoors. Avoid moisture. Protect from heat.
<b>Incompatible materials:</b>	Strong acids. Strong oxidizers. Strong bases.
<b>Safe packaging materials:</b>	Keep it in the original container.

## 8. Exposure Controls / Personal Protection

### 8.1 Control parameters

<b>8.1.1 Occupational exposure limits:</b>	Not available
<b>8.1.2 Engineering controls:</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### 8.2 Personal protection equipment

<b>Respiratory protection:</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
<b>Hand protection:</b>	Wear chemical-resistant gloves.
<b>Eye protection:</b>	Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.
<b>Skin and body protection:</b>	Wear footwear, and protective clothing.
<b>Hygiene measures:</b>	Do not get in eyes. Wash hands before breaks and immediately after handling the product.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	Liquid
<b>Form:</b>	Transparent liquid
<b>Color:</b>	Light yellow
<b>Odor:</b>	Not available
<b>pH:</b>	≥4.2
<b>Melting point/freezing point:</b>	< -55 °C
<b>Boiling point, initial boiling point, and</b>	345 °C

<b>boiling range:</b>	
<b>Flash point:</b>	146 °C
<b>Auto-ignition temperature:</b>	310 °C
<b>Flammability limit - lower (%):</b>	Not available
<b>Flammability limit - upper (%):</b>	Not available
<b>Explosive limit - lower (%):</b>	Not available
<b>Explosive limit - upper (%):</b>	Not available
<b>Vapor pressure (20°C):</b>	1.2 hPa
<b>Relative vapor density:</b>	Not available
<b>Density:</b>	1070 kg/m <sup>3</sup> (20°C)
<b>Solubility:</b>	Not available
<b>Partition coefficient (n-octanol/water):</b>	log Pow=-0.62
<b>Decomposition temperature:</b>	>= 330 °C
<b>Ignition temperature:</b>	Not available
<b>Molecular formula:</b>	C <sub>21</sub> H <sub>45</sub> BO <sub>12</sub>
<b>Molecular weight:</b>	500.3858

#### 9.2 Other data

<b>Solubility (other):</b>	Not available
<b>Evaporation rate:</b>	Not available
<b>Flammability (solid, gas):</b>	Not available
<b>Explosive properties:</b>	Non explosive
<b>Oxidising properties:</b>	No oxidising properties
<b>Surface tension:</b>	Not available
<b>Viscosity:</b>	8.4 mm <sup>2</sup> /s (static) (40 °C)

## 10. Stability and Reactivity

<b>10.1 Stability:</b>	Stable under normal conditions.
<b>10.2 Possibility of hazardous reactions:</b>	No dangerous reactions known.
<b>10.3 Conditions to avoid:</b>	Incompatible materials. Do not distill to dryness. Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.
<b>10.4 Incompatible materials:</b>	Strong acids. Strong oxidizers. Strong bases.
<b>10.5 Hazardous decomposition products:</b>	Carbon oxides.

## 11. Toxicological Information

<b>11.1 Toxicokinetics, metabolism and distribution:</b>	Not available.
<b>11.2 Information on toxicological effects</b>	
<b>Acute toxicity:</b>	
<b>LD50(Oral, Rat):</b>	> 2000 mg/kg bw
<b>LD50(Dermal, Rat):</b>	> 2000 mg/kg bw
<b>LC50(Inhalation, Rat):</b>	Not available
<b>Skin corrosion/Irritation:</b>	Not classified
<b>Serious eye damage/irritation:</b>	Not classified

Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

## 12. Ecological Information

<b>12.1 Toxicity:</b>	
Fish	LC50 (96h): > 222.2 mg/L
Daphnia	EC50 (48h): > 500 mg/L
Algae	EC50 (72h): > 224.4 mg/L
<b>12.2 Persistence and degradability:</b>	Readily biodegradable.
<b>12.3 Bioaccumulative potential:</b>	Not available
<b>12.4 Mobility in soil:</b>	Not available
<b>12.5 Other hazardous effects:</b>	Not available

## 13. Disposal Considerations

<b>13.1 Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>13.2 Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
<b>13.3 Local disposal regulations</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

## 14. Transport Information

<b>UN-Number:</b>	Not regulated
<b>UN Proper shipping name:</b>	Not regulated
<b>Transport hazard Class:</b>	Not regulated
<b>Packaging group:</b>	Not regulated
<b>Environmental hazards(Yes/No):</b>	No
<b>Special precautions for user:</b>	See section 2.2

## 15. Regulatory Information

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



Regulations names	information	
Regulations on the safety administration of dangerous chemicals	Catalog of Hazardous Chemicals	Not listed
	List of Hazardous Chemicals for Priority Management	Not listed
Regulations on labor protection in workplaces where toxic substances are used	Catalog of Highly Toxic substances	Not listed
Regulations on the environmental management of first import of toxic chemicals	List of Toxic Chemicals Restricted to be Imported/Exported	Not listed
Measures for environmental management of new chemical substances	Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	Listed

#### 15.2 Note for downstream users:

Disposal of products/containers according to local regulations.

### 16. Other Information

#### 16.1 Indication of changes

Version 1.0 Amended by GB/T16483-2008 and GB/T17519-2013.

#### 16.2 Training instructions:

Not applicable.

#### 16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

#### 16.4 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

#### 16.5 Abbreviations:

ADR: 《European Agreement Concerning the International Carriage of Dangerous Goods by Road》

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail (European law)

IMDG: International Maritime Dangerous Goods

EINECS: European Inventory of Existing commercial Chemical Substances

IATA: International Air Transport Association

ICAO-TI: International Civil Aviation Organization 《The International Civil Aviation Covenant》 (ICAO)

CAS: Chemical Abstracts Service

LC50: Lethal Concentration 50

EC50: Concentration for 50% of maximal effect

LD50: Lethal dose 50%

This material safety data sheet is compiled based on our best understanding on the safety and correct use of this product. However, we could guarantee neither its timeliness nor the implied or expressed information. For the above contents, our company would not take any liability due to its usage. Users shall identify the best information on each specific use by their survey. Each user should read this specification carefully before use it. If you need further information for a correct assessment, please contact us.

Author: Hangzhou CIRS Co., Limited Website: [www.cirs-group.com](http://www.cirs-group.com) Tel: 0571-87206555 Email: [info@cirs-group.com](mailto:info@cirs-group.com)