

# Chemical Safety Data Sheet

## Section 1 IDENTIFICATION

**GHS Product identifier:** Ethylene glycol monobutyl ether.

**Other means of identification:** /

**Recommended use of the chemical and restrictions on use:** /

**Supplier's details:**/

**Emergency phone number:** /

## Section 2 HAZARDS IDENTIFICATION

### **Classification of the substance or mixture:**

Flammable liquids Category 4

Acute toxicity, (inhalation) Category 3

Acute toxicity (Dermal) Category 3

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

### **GHS Label elements, including precautionary statements:**

Symbol:

Signal word: Danger

Hazard statement(s): Combustible liquid. Toxic in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation.

Precautionary statement(s):

### **Prevention:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands [and ...] thoroughly after handling. Use only outdoors or in a well-ventilated area. Do not touch eyes. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

### **Response:**

In case of fire: Use spray, foam or dry powder to extinguish. IF ON SKIN: Take off immediately all contaminated clothing. Take off contaminated clothing. And wash it before reuse. Wash with plenty of water/... Get emergency medical help immediately. Specific treatment (see below). IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get emergency medical help immediately. Specific treatment (see below). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help.

### **Storage:**

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

### **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards which do not result in classification:** /

## Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
Ethylene glycol monobutyl ether	111-76-2	99.88%

#### Section 4 FIRST AID MEASURES

##### Description of necessary first aid measures

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician immediately.

**In case of skin contact:** Wash off with soap and plenty of running water. Consult a physician immediately. **In case of eye contact:** Rinse thoroughly with plenty of running water for at least 15 minutes and consult a physician immediately.

**If ingestion:** Rinse mouth with water. Consult a physician immediately.

**Most important symptoms/effects, acute and delayed:** /

**Indication of immediate medical attention and special treatment needed, if necessary:** /

#### Section 5 FIREFIGHTING MEASURES

**Suitable extinguishing media:** Use foam, dry powder, water spray to extinguish.

**Special hazards arising from the chemical:** This material is combustible. It may burn and decompose at high temperature and fire and release toxic fumes.

**Special protective actions for fire-fighters:** Firefighters must wear air breathing apparatus, fire-fighting suits and protective gloves to extinguish in the upwind direction. Whenever possible, remove the container from the fire to open space and use spray water to cool unopened containers.

#### Section 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** It is recommended that emergency personnel wear gas masks and anti-poison suits. Do not touch the spill directly.

**Environmental precautions:** Isolate contaminated areas and restrict access.

**Methods and materials for containment and cleaning up:** Small amount of leakage: adsorption with sand or other inert materials. Do not allow products to enter restricted areas such as sewers. A large amount of leakage: building a dike or digging a pit to contain. Transfer to a tank truck or special collector with a pump and transport to a waste disposal site for disposal.

#### Section 7 HANDLING AND STORAGE

**Precautions for safe handling:** There should be sufficient local exhaust in workplace. Operators should be trained and strictly follow the operating procedures. Operators are advised to wear gas masks, anti-poison suits and rubber gloves. Operators should load and unload lightly during handling to prevent damage to the package. There should be leakage treatment equipment in workplace. There may be harmful residues in empty containers.

**Conditions for safe storage, including any incompatibilities:** Store in a cool, dry, well-ventilated warehouse. Keep away from fire and heat. Protect from direct sunlight. The package should be sealed and not exposed to moisture. It should be stored separately from oxidants, flammable materials, etc., and should not be mixed. The storage area should be provided with suitable materials to contain spills.

#### Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Control parameters:

Source	Ingredient	Material name	TWA
China Occupational Exposure Limits fbr ethylene glycol ,	2-butoxyethanol	97 mg/m <sup>3</sup>	Hazardous Agents

in the Workplace monobutyl ether ~

**Appropriate engineering controls:** Close strictly and provide sufficient local exhaust.

**Individual protection measures**

**Eye/face protection:** Wear a gas mask.

**Skin protection:** Wear an anti-poison suit.

**Respiratory protection:** Air respirators should be worn during emergency rescue or evacuation. Type A Filter of sufficient capacity.

**Thermal hazards:** /

#### Section 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Liquid.
<b>Colour</b>	Colorless transparent
<b>Odour</b>	/
<b>Melting point/freezing point</b>	-70°C
<b>Boiling point or initial boiling point and boiling range</b>	171-172°C
<b>Flammability</b>	Combustible.
<b>Lower and upper explosion limit/flammability limit</b>	
<b>Flash point</b>	68.5 °C
<b>Auto-ignition temperature</b>	/
<b>Decomposition temperature</b>	/
<b>pH</b>	/
<b>Kinematic viscosity</b>	/
<b>Solubility</b>	miscible
<b>Partition coefficient: n-octanol/water (log value)</b>	/
<b>Vapour pressure</b>	0.08 @ 20°C
<b>Density and/or relative density</b>	0.90 @ 20°C
<b>Relative vapour density</b>	4.1
<b>Particle characteristics</b>	/

#### Section 10 STABILITY AND REACTIVITY

**Reactivity:** /

**Chemical stability:** This material is stable in normal temperature. **Possibility of hazardous reactions:** May release toxic fumes. **Conditions to avoid:** Spark, static electricity and high temperature. **Incompatible materials:** Flammable materials and oxidizers. **Hazardous decomposition products:** Oxycarbides.

#### Section 11 TOXICOLOGICAL INFORMATION

**Information on the likely routes of exposure:** Ingestion (swallowing), skin/eye exposure and inhalation.

**Symptoms related to the physical, chemical and toxicological characteristics:** /

**Acute health effects:**

Ingestion can be fatal and cause symptoms such as nausea, vomiting and abdominal pain.

Skin contact cause redness and irritation and may cause an allergic skin reaction.

Inhalation cause cough, throat irritation.

Eyes contact can cause redness and irritation.

**Chronic health effects:** Repeated or prolonged exposure may damage organs.

**Numerical measures of toxicity (such as acute toxicity estimates):**

Inhalation (rat) LC50: 2.21 mg/l/4h

dermal (guinea pig) LD50: 210 mg/kg

Oral (Rat) LD50:300 mg/kg

Section 12 ECOLOGICAL INFORMATION

**Toxicity:**

Endpoint	Test Duration (hr)	Species	Value
EC50	72h	Algae or other aquatic plants	623mg/l
EC10(ECx)	48h	Crustacea	7.2mg/l
EC50	48h	Crustacea	164mg/l
EC50	96h	Algae or other aquatic plants	720mg/l
LC50	96h	Fish	1700mg/l

**Persistence and degradability:** Low.

**Bioaccumulative potential:** Low ((BCF = 2.51)).

**Mobility in soil:** HIGH (KOC = 1).

**Other adverse effects:** /

Section 13 DISPOSAL CONSIDERATIONS

**Disposal methods:** Dispose this product by safe burial. Damaged containers are prohibited from being reused and should be buried in the prescribed place.

Section 14 TRANSPORT INFORMATION

**UN number:** 2810.

**UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S.

**Transport hazard class(es):** 6.1.

**Packing group, if applicable:** III.

**Environmental hazards:** /

**Special precautions for user:** /

Section 15 REGULATORY INFORMATION

**Regulations:** This safety data sheet is in compliance with the following national standards: GB/T 16483-2008, GB 13690-2009, GB 18218-2018, GB 15258-2009, GB 6944-2012, GB 190-2009, GB/T 191-2008, GB 12268-2012 > GB/T 15098-2008 > GBZ 2.1 · 2019、GBZ 2.2-2007 as well as the following national regulations: Dangerous Goods Transport Administrative Regulation, Dangerous Chemicals Safety Administrative Regulation.

Section 16 OTHER INFORMATION

<b>References</b>	UN Recommendations on the Transport of Dangerous Goods Model Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals
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| **Form Date**                      22-Sep-2022

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer/supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with 'T' logo.