

## Ethylene Glycol Dibutyl Ether 112-48-1 MSDS

### Section 1. IDENTIFICATION

**Product name:** Ethylene Glycol Dibutyl Ether

**Revision number:** 5

### Section 2. HAZARDS IDENTIFICATION

**GHS classification**

**PHYSICAL HAZARDS**

Category 4

**Flammable liquids**

**HEALTH HAZARDS**

Category 5

**Acute toxicity (Oral)**

**Acute toxicity (Dermal)** Category 5

Category 3

**Skin corrosion/irritation**

**Serious eye damage/eye irritation** Category 2B

Not classified

**ENVIRONMENTAL HAZARDS**

**GHS label elements, including precautionary statements**

None

**Pictograms or hazard symbols**

**Signal word** Warning

Combustible liquid

**Hazard statements**

May be harmful if swallowed or in contact with skin

Causes mild skin irritation

Causes eye irritation

**Precautionary statements:**

**[Prevention]** Keep away from flames and hot surfaces.

Wear protective gloves and eye/face protection.

**[Response]** 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 advice/attention.

Wash hands thoroughly after handling.

If skin irritation occurs: Get medical advice/attention.

Call a POISON CENTER or doctor/physician if you feel unwell.

**[Storage]** Store in a well-ventilated place. Keep cool.

**[Disposal]** Dispose of contents/container through a waste management company authorized by the local government.

**Other hazards which do not result in classification**      May form explosive peroxides.

### Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/mixture:**      Substance

**Components:**      Ethylene Glycol Dibutyl Ether

**Percent:**      >98.0%(GC)

**CAS Number:**      112-48-1

**Synonyms:**      1,2-Dibutoxyethane , Dibutyl Cellosolve , Dibutyl Glycol

**Chemical Formula:**      C10H22O2

**Ethylene Glycol Dibutyl Ether**

### Section 4. FIRST AID MEASURES

**Inhalation:**      Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact:**      Remove/Take off immediately all contaminated clothing. Gently wash with plenty of

soap and water. If skin irritation or rash occurs: Get medical advice/attention.

**Eye contact:**      Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Ingestion:**      Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

**Most important symptoms/effects, acute**      Dry skin, Redness

**and delayed:**

A rescuer should wear personal protective equipment, such as rubber gloves and air-

**Protection of first-aiders:**

tight goggles.

### Section 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**      Dry chemical, foam, carbon dioxide.

**media:**

**Unsuitable extinguishing media:**      Water (It may scatter and spread fire.)

**media:**

**Precautions for firefighters:** Fire-extinguishing work is done from the windward and the suitable fire-extinguishing

method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.

**Special protective equipment for firefighters:**      When extinguishing fire, be sure to wear personal protective equipment.

**equipment for firefighters:**

## Section 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions,** Use personal protective equipment. Keep people away from and upwind of spill/leak.

**protective equipment and Ensure adequate ventilation. Entry to non-involved personnel should be controlled**

**emergency procedures: around the leakage area by roping off, etc.**

**Environmental precautions: Prevent product from entering drains.**

**Methods and materials for Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust).**

**containment and cleaning In case of large amount of spillage, contain a spill by bunding. Adhered or collected**

**up: material should be promptly disposed of, in accordance with appropriate laws and regulations.**

**Prevention of secondary Remove all sources of ignition. Fire-extinguishing devices should be prepared in**

**hazards:** case of a fire. Use spark-proof tools and explosion-proof equipment.

## Section 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Technical measures:** Handling is performed in a well ventilated place. Wear suitable protective equipment.

Prevent generation of vapour or mist. Keep away from flames and hot surfaces. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling.

Use a closed system, ventilation.

**Advice on safe handling: Avoid contact with skin, eyes and clothing.**

Confirm in advance if peroxides exist when operations involving heating such as distillation are carried out.

**Conditions for safe storage, including any incompatibilities**

**Storage conditions:** Keep container tightly closed. Store in a cool, dark and well-ventilated place.

Store away from incompatible materials such as oxidizing agents.

**Packaging material:** Comply with laws.

**Ethylene Glycol Dibutyl Ether**

## Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** Install a closed system or local exhaust as possible so that workers should not be

exposed directly. Also install safety shower and eye bath.

**Personal protective equipment**

**Respiratory protection: Vapor respirator. Follow local and national regulations.**

**Hand protection:** Protective gloves.

Safety glasses. A face-shield, if the situation requires.

**Eye protection:**

**Skin and body protection: Protective clothing. Protective boots, if the situation requires.**

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state (20°C):** Liquid

Clear

**Form:**

**Colour:** Colorless - Almost colorless

Characteristic

**Odour:**

**pH: No data available**

**Melting point/freezing point:-69°C**

**Boiling point/range:** 202°C

**Flash point:** 85°C

**Flammability or explosive**

**limits:**

**Lower:** No data available

**Upper:** No data available

**Vapour pressure:** 12Pa/20°C

**Vapour density:** 6

**Relative density:** 0.84

**Solubility(ies):**

**[Water]** Very slightly soluble

**[Other solvents]** No data available

## Section 10. STABILITY AND REACTIVITY

**Chemical stability:** May form explosive peroxides.

**Possibility of hazardous No special reactivity has been reported.**

**reactions:**

**Conditions to avoid:** Open flame, Air

**Incompatible materials: Oxidizing agents**

**Hazardous decomposition Carbon monoxide, Carbon dioxide**

**products:**

## Section 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** orl-rat LD50:2650 mg/kg

orl-rbt LD50:1425 mg/kg

skn-rbt LD50:3560 uL/kg

**Skin corrosion/irritation: skn-rbt 500 mg open MLD**

**Serious eye** No data available

**damage/irritation:**

**Germ cell mutagenicity: No data available**

**Carcinogenicity:****IARC =** No data available**NTP =** No data available**Reproductive toxicity:** No data available**RTECS Number:** KH9450000**Section 12. ECOLOGICAL INFORMATION****Ecotoxicity:****Fish:** No data available

No data available

**Crustacea:****Algae:** No data available**Ethylene Glycol Dibutyl Ether****Section 12. ECOLOGICAL INFORMATION****Persistence / degradability: No data available****Bioaccumulative** No data available**potential(BCF):****Mobility in soil****Log Pow:** No data available

No data available

**Soil adsorption (Koc):****Henry's Law** No data available**constant(PaM3/mol):****Section 13. DISPOSAL CONSIDERATIONS**

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical

incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when

disposing of the substance.

**Section 14. TRANSPORT INFORMATION****Hazards Class:** Does not correspond to the classification standard of the United Nations

Not listed

**UN-No:****Section 15. REGULATORY INFORMATION****Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002****and revised on February 16,2011): Safe use and production, the storage of a dangerous chemical, transport,**

loading and unloading were prescribed.

**SECTION 16 - ADDITIONAL INFORMATION**

N/A