

Global Product Strategy (GPS) Safety Summary

Glycol Ether EB Acetate

This GPS Safety Summary is a high-level summary intended to provide the general public with an overview of product safety information on this chemical substance. It is not intended to provide emergency response, medical or treatment information, or to provide an overview of all safety and health information. This summary is not intended to replace the Safety Data Sheet. For detailed guidance on the use or regulatory status of this substance, please consult the Safety Data Sheet and the Product Stewardship Bulletin (PSB).

Chemical Identity

Name: Glycol Ether EB Acetate

Brand names: Glycol Ether EB Acetate

Chemical name (IUPAC): 2-butoxyethanol acetate

Synonym: Ethylene Glycol Monobutyl Ether Acetate (EGBEA)

CAS number: 112-07-2

EC number: 203-933-3

Molecular formula: C₈H₁₆O₃

Uses and Applications

Glycol Ether EB Acetate can be found in applications as a solvent in printing ink and surface coating formulations. It is also an excellent solvent for many natural and synthetic resins.

Physical / Chemical Properties

Glycol Ether EB Acetate EBA is a colorless liquid with a mild ester-like odor. It is miscible with most organic solvents and is partially soluble in water. It has a flash point of >74°C (165°F) and is classified as combustible under the Globally Harmonized System (GHS) on classification and labeling. The boiling point and freezing point are 190°C (374°F) and -82°C (-116°F), respectively.

Health Effects

Glycol Ether EB Acetate presents a moderate acute toxicity hazard to humans after exposure via ingestion, skin contact and inhalation. It is slightly irritating to the eyes, skin and respiratory tract. Glycol Ether EB Acetate is classified as hazardous under GHS for its health effects.

The table below gives an overview of the health effects assessment results for Glycol Ether EB Acetate.

Effect Assessment	Result
Acute toxicity Oral / inhalation / dermal	Moderate acute toxicity by the oral, inhalation and dermal routes of exposure

Irritation / corrosion Skin / eye / respiratory tract	Slightly irritating to the skin, eyes and respiratory tract
Sensitization	Not expected to be a sensitizer
Toxicity after repeated exposure Oral / inhalation / dermal	Low concern for repeated exposure toxicity
Genotoxicity / mutagenicity	Not expected to be genotoxic, nor mutagenic
Carcinogenicity	Not considered to be a human carcinogen. Tumors produced in animals exposed to ethylene glycol monobutyl ether, a metabolite of Glycol Ether EB Acetate, are questionably relevant to humans
Toxicity for reproduction	Not expected to be toxic to reproduction

Environmental Effects

The table below gives an overview of the environmental effects assessment results for Glycol Ether EB Acetate, which is classified as hazardous to the aquatic environment according under GHS.

Effect Assessment	Result
Aquatic toxicity	This material is not harmful or toxic to fish or algae or higher aquatic plants, but can be harmful to invertebrates

Fate and behaviour	Result
Biodegradation	Expected to be biodegradable
Bio-accumulation potential	Low potential to bio-accumulate
PBT / vPvB conclusion	Not considered to be either PBT or vPvB.

PBT = Persistent, Bio-accumulative and Toxic in the environment.
vPvB = very Persistent and very Bio-accumulative in the environment.

Exposure

Human health

Consumers may be exposed to small amounts of Glycol Ether EB Acetate during the use of consumer products containing Glycol Ether EB Acetate.

Worker exposure to Glycol Ether EB Acetate in manufacturing facilities is low because the process, storage and handling operations are generally enclosed. However, worker exposure can potentially occur during operations such as product transfer, product sampling, or maintenance / repair activities on product containing systems. The risk of accidental exposure should be controlled by selecting and applying the appropriate Risk Management Measures.

Professional and industrial workers may come into contact with Glycol Ether EB Acetate as a component of industrial products containing Glycol Ether EB Acetate. Exposure should be controlled by selecting and applying the appropriate Risk Management Measures.

Environment

The manufacture of Glycol Ether EB Acetate is a closed and automated process. Also, transfer (loading and transport) of the product is conducted in a closed system to prevent release.

However, due to its use as a component in products such as inks and coatings, Glycol Ether EB Acetate has indoor and outdoor environmental release possibilities.

Glycol Ether EB Acetate is soluble in water and not expected to be bio-accumulative.

Risk Management Measures

For detailed guidance on the use of Glycol Ether EB Acetate, the Safety Data Sheet should be consulted.

Consumer use

When using a consumer product containing Glycol Ether EB Acetate at home, all instructions and precautions should be read, understood and followed, such as recommendations for use of eye protection and gloves. Adequate ventilation should be provided, and it should not be used near open flames or other ignition sources.

Human health (industrial and professional use)

When using chemicals make sure that there is adequate ventilation. Use appropriate chemical-resistant gloves to protect your hands and skin, wear eye protection such as chemical goggles and wear flame-retardant clothing. Do not eat, drink or smoke where chemicals are handled, processed or stored. Wash hands and skin following contact. If the substance gets into your eyes, rinse eyes thoroughly for at least 15 minutes with tap water and seek medical attention.

In the case of transfer or maintenance operations, clear transfer lines prior to decoupling, and flush/drain to a closed system for recycle prior to opening equipment.

In cases where engineering controls cannot maintain airborne substance concentrations below exposure limits, or in cases with a risk of accidental exposure, additional risk management measures may be necessary such as the use of a complete suit protecting against chemicals and supplied air, a self-contained breathing apparatus or respirator.

Spills and Leaks

Eliminate all sources of ignition. Equipment used when handling this product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.

Regulatory Information / Classification and Labeling

This substance has been registered under REACH by relevant companies of LyondellBasell in the European Union.

For a detailed overview of the regulatory status of this substance, please refer to the Product Stewardship Bulletin available on lyondellbasell.com.

Under the Globally Harmonized System on classification and labeling (GHS) substances are classified according to their physical, health and environmental hazards. The hazards are communicated via specific labels on the product packaging and the Safety Data Sheet. GHS attempts to standardize hazard communication so that the intended audience (workers, consumers, transport workers, and emergency responders) can better understand the hazards of the chemicals in use.

For a detailed overview of the classification and labeling of this substance, please refer to the regional Safety Data Sheet found on lyondellbasell.com.

Conclusion Statements

- Glycol Ether EB Acetate can be found in applications as a solvent in printing ink and surface coating formulations. It is also an excellent solvent for many natural and synthetic resins.
- Glycol Ether EB Acetate is hazardous under GHS. The material is combustible, moderately toxic via all routes of exposure and a slight skin, eye and respiratory tract irritant. It should be used only in well ventilated areas away from ignition sources and with the recommended risk management measures.
- Glycol Ether EB Acetate is not expected to be harmful or toxic to fish or algae or higher aquatic plants, but it is classified under GHS as harmful to invertebrates.

Contact Information within Company

For further information on this product in general, please consult the LyondellBasell corporate website (www.lyb.com).

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Disclaimer

Before using a product sold by a company of the LyondellBasell family of companies, users should make their own independent determination that the product is suitable for the intended use and can be used safely and legally.

SELLER MAKES NO WARRANTY; EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTY) OTHER THAN AS SEPARATELY AGREED TO BY THE PARTIES IN A CONTRACT.

This product(s) may not be used in:

- (i) any U.S. FDA Class I, Health Canada Class I, and/or European Union Class I medical devices, without prior notification to Seller for each specific product and application; or
- (ii) the manufacture of any of the following, without prior written approval by Seller for each specific product and application: U.S. FDA Class II Medical Devices; Health Canada Class II or Class III

Medical Devices; European Union Class II Medical Devices; film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices; packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration; tobacco related products and applications, electronic cigarettes and similar devices, and pressure pipe or fittings that are considered a part or component of a nuclear reactor. Additionally, the product(s) may not be used in: (i) U.S. FDA Class III Medical Devices; Health Canada Class IV Medical Devices; European Class III Medical Devices; (ii) applications involving permanent implantation into the body; (iii) life-sustaining medical applications; and (iv) lead, asbestos or MTBE related applications. All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.

Users should review the applicable Safety Data Sheet before handling the product.

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