

**GLYCOL ETHER DB ACETATE**

Gen. Variant: SDS\_US\_GHS

Version 1.2

Revision Date 09/14/2015

Print Date 10/24/2017

SDS No.: 3378

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : GLYCOL ETHER DB ACETATE  
CAS Number: 124-17-4  
Chemical characterization : Glycol Ethers  
Chemical Name : 2-(2-butoxyethoxy)ethanol acetate  
Synonyms : Diethylene Glycol Monobutyl Ether Acetate; Butoxyethoxy Ether Acetate; Diglycolmonobutyl ether acetate, Butyl diglycol acetate (BDGA); Diethylene glycol butyl ether acetate (DEGBEA)

Identified uses : Solvent; Uses in Coatings

Company : Equistar Chemicals, LP  
LyondellBasell Tower, Suite 300  
1221 McKinney St.  
P.O. Box 2583  
Houston Texas 77252-2583

Telephone : Customer Service  
888 777-0232  
Product Safety  
800 700-0946

Emergency telephone : CHEMTREC USA 800-424-9300  
EQUISTAR 800-245-4532

E-mail address : product.safety@lyb.com

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Acute aquatic toxicity

Category 3

GHS Classification Scale (1= severe hazard; 4= slight hazard)

**Label elements****Hazard Statements** : H402 Harmful to aquatic life.**Precautionary Statements** : **Prevention**  
P273 Avoid release to the environment.

Not classified as hazardous according to OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

**Other hazards**

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No additional information available.

**3. Composition/information on ingredients****Substances**

Chemical nature : Substance

**Ingredients**

| Chemical Name                      | CAS-No.<br>EC-No. | Weight %      | Component<br>Type |
|------------------------------------|-------------------|---------------|-------------------|
| 2-(2-Butoxyethoxy) ethanol acetate | 124-17-4          | 98.0 - 99.5 % | A                 |
| Diethylene glycol monobutyl ether  | 112-34-5          | <0.75 %       | C                 |

Key:

(A) Substance

(C) Impurity

**SECTION 4. FIRST AID MEASURES****First aid procedures**

- General advice : Consult a physician/doctor if necessary.  
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid.  
Show this material safety data sheet to the doctor in attendance.
- If inhaled : Move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. When breathing is difficult, properly trained personnel may assist the affected person by administering oxygen. Keep the affected person warm and at rest. Get medical attention immediately.
- In case of skin contact : Immediately remove excess chemical and contaminated clothing; thoroughly wash contaminated skin with mild soap and water. If irritation persists after washing, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, belts, wallets, etc.).
- In case of eye contact : Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
- If swallowed : NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Have patient drink several glasses of water then induce vomiting by having patient tickle back of throat with finger.

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**Notes to physician**

- Symptoms : irritant effects  
Repeated exposure may cause skin dryness or cracking.
- Treatment : Treat symptomatically.  
Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

**SECTION 5. FIRE-FIGHTING MEASURES****Flammable properties**

- Flash point : 241 °F (116 °C)  
Method: (ASTM D93)  
Pensky-Martens
- Autoignition temperature : 508.73 °F (264.85 °C)  
at 1,013 hPa (760 mm Hg)
- Lower explosion limit : 0.8 vol%
- Upper explosion limit : 5.0 vol%

**Fire fighting**

- Suitable extinguishing media : SMALL FIRE: Use dry chemicals, CO<sub>2</sub>, water spray or alcohol-resistant foam  
LARGE FIRE: Use water spray, water fog or foam. DO NOT use straight streams  
Water may be ineffective, but should be used to keep fire-exposed containers cool.

**Protective equipment and precautions for firefighters**

- Specific hazards during fire fighting : Avoid sparks, heat, and open flame.  
Individuals should perform only those fire-fighting procedures for which they have been trained. Fire fighters should wear self-contained breathing apparatus in the positive pressure mode with a full face piece when there is a possibility of exposure to smoke, fumes or hazardous decomposition products. Cool tanks and containers exposed to fire with water.
- Special protective equipment for fire-fighters : Wear a NIOSH approved respirator following manufacturer's recommendations, where airborne contaminants may occur.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions : Evacuate personnel to safe areas.  
Keep people away from and upwind of spill/leak.  
Use personal protective equipment.

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- Ensure adequate ventilation.  
Eliminate all sources of ignition.
- Environmental precautions : Do not allow contact with soil, surface or ground water.  
Do not discharge product into the aquatic environment without pretreatment (biological treatment plant).  
Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.
- Methods for containment /  
Methods for cleaning up : Contain spill with dike to prevent entry into sewers or waterways.  
For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal.  
All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.
- Additional advice : See Section 15: Regulatory Information.

**SECTION 7. HANDLING AND STORAGE****Handling**

- Advice on safe handling : Containers, even those that have been emptied, will retain product residue and vapor and should be handled as if they were full. Do not eat, drink or smoke in areas where this material is used.  
After handling, always wash hands thoroughly with soap and water.  
Do not handle near heat, sparks, or flame. Avoid contact with incompatible agents. Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded.

**Storage**

- Requirements for storage areas and containers : Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials.  
Keep container tightly closed and properly labeled.

**8. Exposure controls/personal protection****Control parameters****Ingredients with workplace control parameters****Occupational Exposure Limits**

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| Ingredients                       | CAS-No.  | Type | Limit Value                                 | Basis<br>Revision Date | Additional<br>Information |
|-----------------------------------|----------|------|---|------------------------|---------------------------|
| Diethylene glycol monobutyl ether | 112-34-5 | TWA  | 10<br>ppminhalable<br>fraction and<br>vapor | US (ACGIH)<br>2013     |                           |

Consult local authorities for acceptable exposure limits.

**Exposure controls****Engineering measures**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1)

**Personal protective equipment**

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection : Wear chemical resistant gloves such as:  
Butyl rubber.  
Neoprene.

Eye and face protection : Safety glasses with side-shields

Skin and body protection : Appropriate protective clothing should be worn to prevent skin contact.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Physical state : liquid

Color : Clear

Odor : Mild odor.

: Aromatic.

**Safety data**

Flash point : 241 °F (116 °C)  
Method: (ASTM D93)  
Pensky-Martens

Lower explosion limit : 0.8 vol%

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|  |  |
|--|--|
| Upper explosion limit                  | : 5.0 vol%   |
| Oxidizing properties                   | : Not considered an oxidizing agent.                               |
| Autoignition temperature               | : 508.73 °F (264.85 °C)<br>at 1,013 hPa (760 mm Hg)                |
| Molecular weight                       | : 204.26 g/mol   |
| Decomposition temperature              | : not determined   |
| pH                                     | : 5 - 6  |
| Melting point/freezing point           | : ~ -26 °F (-32 °C)  |
| Boiling point/boiling range            | : 473 °F (245 °C)<br>at 1,013 hPa (760 mm Hg)                      |
| Vapor pressure                         | : < 0.005 hPa (0.004 mm Hg)<br>at 68 °F (20 °C)                    |
| Density                                | : 0.977 g/cm <sup>3</sup><br>at 68 °F (20 °C)<br>Method: DIN 51757 |
| Water solubility                       | : 65 g/l<br>at 68 °F (20 °C)<br>6.5 % (by wt.)                     |
| Partition coefficient: n-octanol/water | : log Pow: 1.7<br>at 73 °F (23 °C)                                 |
| Viscosity, dynamic                     | : 3.5 mPa.s<br>at 68 °F (20 °C)                                    |
| Viscosity, kinematic                   | : 3.5 mm <sup>2</sup> /s<br>at 68 °F (20 °C)                       |
| Relative vapor density                 | : 7  |
| Evaporation rate                       | : <0.01<br>(butyl acetate = 1)                                     |
| Explosive properties                   | : Not explosive  |
| Remarks - Other information            | : No additional information available.                             |

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Will not occur.

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|                                  |  |
|----------------------------------|--|
| Chemical stability               | : Stable under recommended storage conditions.                               |
| Conditions to avoid              | : Avoid contact with strong oxidizers, excessive heat, sparks or open flame. |
| Materials to avoid               | : Oxidizers, Acids, Alkalis  |
| Hazardous decomposition products | : Not expected to decompose under normal conditions.                         |
| Thermal decomposition            | : Carbon oxides (CO, CO <sub>2</sub> )                                       |
| Hazardous reactions              | : Will not occur.  |

**SECTION 11. TOXICOLOGICAL INFORMATION**

|  |   |
|--|---|
| <b>Product Summary</b>                   | : The below given information is based on the assessment of the product including impurities.                   |
| <b>Acute toxicity</b>                    |   |
| <b>Acute oral toxicity</b>               | : Based on acute toxicity values, not classified.<br>: LD50: 2,340 mg/kg<br>Species: Guinea pig                 |
| <b>Acute inhalation toxicity</b>         | : Based on acute toxicity values, not classified.<br>: LC50: 8692 ppm<br>Exposure time: 4 HOURS<br>Species: Rat |
| <b>Acute dermal toxicity</b>             | : Based on acute toxicity values, not classified.<br>: LD50: 5,400 mg/kg<br>Species: Rabbit                     |
| <b>Skin corrosion/irritation</b>         | : Based on skin irritation values, not classified.<br>May cause slight transient skin irritation.               |
| <b>Serious eye damage/eye irritation</b> | : Based on eye irritation values, not classified.<br>: May cause mild eye irritation.                           |
| <b>Respiratory or skin</b>               | : Respiratory sensitization   |

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**sensitization**Not classified  
No study available.: Skin sensitization  
Not classified  
No adverse effect observed.**Chronic toxicity**

## Carcinogenicity

: Not classified  
No Data Available.

## Germ cell mutagenicity

: Not classified  
No adverse effect observed.**Reproductive toxicity**Effects on fertility /  
Effects on or via lactation: Not classified  
No adverse effect observed.

## Effects on Development

: Not classified  
No adverse effect observed.**Target Organ Systemic  
Toxicant - Single exposure**

: Based on single exposure toxicity values, not classified.

**Target Organ Systemic  
Toxicant - Repeated  
exposure**

: Based on repeated exposure toxicity values, not classified.

**Aspiration hazard**: Based on physico-chemical values or lack of human evidence,  
not classified.**12. ECOLOGICAL INFORMATION****Ecotoxicology Assessment**

## Acute aquatic toxicity

: Classified  
Harmful to aquatic life.

## Chronic aquatic toxicity

: Not classified, based on readily biodegradability and low acute  
toxicity.**Toxicity to fish**:  
Harmful to fish.

: LC50: ~ 60 mg/l



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Exposure time: 96 HOURS  
Species: Danio rerio (zebra fish)

**Toxicity to daphnia and other aquatic invertebrates** : Low acute toxicity to aquatic invertebrates.

: LC50: 664 mg/l  
Exposure time: 48 HOURS  
Species: Daphnia magna (Water flea)  
Immobilization

**Toxicity to algae** : Low toxicity to algae.

: NOEC: 300 mg/l  
Exposure time: 72 HOURS  
Species: Pseudokirchneriella subcapitata

**Toxicity to bacteria** : Low toxicity to sewage microbes.

**Toxicity to fish (Chronic toxicity)** : No Data Available.

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)** : Low chronic toxicity to aquatic invertebrates.

EC10: 10.85 mg/l  
Exposure time: 7 d  
Species: Ceriodaphnia dubia

Reproduction Test

**Persistence and degradability**

**Biodegradability** : 100 %  
Rapidly degradable.  
(After 20 days in a ready biodegradability test)

**Bioaccumulative potential**

**Bioaccumulation** : Bioconcentration factor (BCF): 6.15  
Method: (QSAR calculated value)  
This material is not expected to bioaccumulate.

**Mobility in soil**

**Distribution among environmental compartments** : Stability in water  
Not expected to hydrolyze readily.  
Diethylene glycol ether acetates do not hydrolyze readily in water under environmental conditions.

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: Stability in soil  
Low absorption to soil particulates predicted

**Additional advice** : No additional information available.  
**Environmental fate and pathways**

**Results of PBT and vPvB assessment**

Not applicable.

**Other adverse effects**

**Additional ecological information** : No additional information available.

**SECTION 13. DISPOSAL CONSIDERATIONS**

Further information : Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from clean-up operations may be hazardous wastes and therefore, subject to specific regulations.

**SECTION 14. TRANSPORT INFORMATION**

Not regulated for transport

**SECTION 15. REGULATORY INFORMATION**

All components of this product are listed or are exempt from listing on the TSCA 8(b) inventory. If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

**SARA 302/304**

This product contains no known chemicals regulated under SARA 302/304.

**SARA 313**

This product contains the following chemicals subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372:

| <u>Component</u>                   | <u>Reporting Threshold</u> |
|------------------------------------|----------------------------|
| 2-(2-Butoxyethoxy) ethanol acetate | 1.0%                       |
| Diethylene glycol monobutyl ether  | 1.0%                       |

**State Reporting**

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This material contains the following chemical substance at very low levels which is regulated under California Proposition 65. However, it is the responsibility of the California business owner to develop his or her own regulatory compliance plan. Contact Product Safety for further information at [product.safety@lyb.com](mailto:product.safety@lyb.com).

| Substance | CASRN    | Type of Toxicity |               |            |              |
|-----------|----------|------------------|---------------|------------|--------------|
|           |          | Carcinogen       | Developmental | Repro-Male | Repro-Female |
| Toluene   | 108-88-3 |                  | X             |            | X            |

This product contains no known chemicals regulated by New Jersey's Worker and Community Right to Know Act.

No components are subject to the Massachusetts Right to Know Act.

This product contains no known chemicals regulated by Pennsylvania's Right to Know Act.

**Other international regulations****Global Inventory Status**

The ingredients of this product are compliant with the following chemical inventory requirements or exemptions.

\*Additional Explanatory Status Statements follow the table, as necessary.

| Country/Region           | Inventory | Status Description             |
|--------------------------|-----------|--------------------------------|
| Australia                | AICS      | Compliant                      |
| Canada                   | DSL       | Compliant                      |
| China                    | IECSC     | Compliant                      |
| Europe                   | REACH     | See REACH Compliance Statement |
| Japan                    | ENCS      | Compliant                      |
| Korea                    | KECI      | Compliant                      |
| New Zealand              | NZIoC     | Compliant                      |
| Philippines              | PICCS     | Compliant                      |
| United States of America | TSCA      | Compliant                      |
| Taiwan                   | TCSCA     | Compliant                      |

**REACH status**

*If the product has been purchased from any company of the LyondellBasell group of companies registered in the European Union, we confirm that the chemical substance in this product has been pre-registered or, where required under REACH, registered, and that we have the intention to proceed with any required registration in accordance with the deadlines set forth in REACH. (Regulation (EU) No. 1907/2006)*

Contact [product.safety@lyb.com](mailto:product.safety@lyb.com) for additional global inventory information.

## SECTION 16. OTHER INFORMATION

## Further information

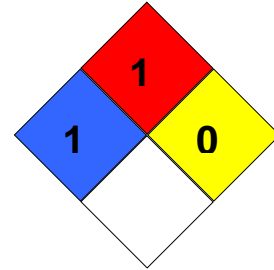
## HMIS Classification

: Health Hazard: 1  
Flammability: 1  
Physical hazards: 0



## NFPA Classification

: Health Hazard: 1  
Fire Hazard: 1  
Instability: 0



## Other Information

HMIS rating scale (0 = minimal hazard; 4 = severe hazard)

NFPA rating scale (0 = minimal hazard; 4 = severe hazard)

## Material safety datasheet sections which have been updated:

Revised Section(s): 4 10 12 15 Revision Date September 17 2015

## Disclaimer

This document is generated for the purpose of distributing health, safety, and environmental data.

Information is correct to the best of our knowledge at the date of the SDS publication.

It is not a specification sheet nor should any displayed data be construed as a specification.

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**Disclaimer**

regulatory classification.

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