



OCI Company Ltd.

Material Safety Data Sheet

# MSDS

## Diethylene Glycol Monobutyl Ether Acetate (Butyl Carbitol Acetate)

### Section 1 - Chemical Product and Company Identification

TRADE NAMES : Diethylene Glycol Monobutyl Ether Acetate (Butyl Carbitol Acetate)

Recommended use : Not available

Restriction of use : Not available

Company Identification

Company : OCI Company Ltd.

Address : 230, Dokbae-ro, Nam-gu, Incheon, KOREA

Tel No. : 82 - 32 - 860 - 6114

### Section 2 - Hazards Identification

1) Hazard Classification      Skin corrosion/irritation : 2

2) Warning signal

Symbol



Signal word                      Warning

Hazard statement              H315 Causes skin irritation

Prevention precautionary statements

P264 Wash thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P321 Specific treatment (see on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

3) NFPA

Health Rating                      No data available

Flammability Rating              1

Reactivity Rating                  0

### Section 3 - Composition, Information on Ingredients

COMPONENT : Diethylene Glycol Monobutyl Ether Acetate (Butyl Carbitol Acetate)

CAS No. : 124-17-4

PERCENTAGE :100%

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#### Section 4 - First Aid Measures

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**General information:** Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

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

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist.

**Skin Contact:** Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.

**Eye contact:** Flush thoroughly with water. If irritation occurs, get medical assistance.

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

**Symptoms:** May cause irritation to skin, eyes, and respiratory tract.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically. Symptoms may be delayed.

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#### Section 5 - Fire Fighting Measures

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**General Fire Hazards:** No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

**Unsuitable extinguishing media:** Water may be ineffective in fighting the fire.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

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#### Section 6 - Accidental Release Measures

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**Personal precautions, protective equipment and emergency procedures:** Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment.

**Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

**Notification Procedures:** Inform authorities if large amounts are involved. Prevent runoff from entering drains, sewers, or streams.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

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#### Section 7 - Handling and Storage

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**Precautions for safe handling:** Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid breathing mist or vapor. Wash hands thoroughly after handling.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed. Store in a cool, dry place. Store in a well-ventilated place.

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## Section 8 - Exposure Controls, Personal Protection

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### Control Parameters

**Occupational Exposure Limits** None of the components have assigned exposure limits.

**Appropriate Engineering Controls** No data available.

### Individual protection measures, such as personal protective equipment

**General information:** 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.

**Eye/face protection:** Use eye protection.

### Skin Protection

**Hand Protection:** Wear protective gloves.

**Other:** Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator.

**Hygiene measures:** Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

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## Section 9 - Physical and Chemical Properties

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### Appearance

**Physical state:** Liquid

**Form:** Liquid

**Color:** Colorless ~ yellow

**Odor:** Good smell

**Odor threshold:** Not applicable

**pH:** No data available.

**Melting point/freezing point:** -32 °C

**Initial boiling point and boiling range:** 247 °C

**Flash Point:** 105 °C

**Evaporation rate:** < 0.01 (Butyl Acetate=1>)

**Flammability (solid, gas):** No data available.

### Upper/lower limit on flammability or explosive limits

**Flammability limit - upper (%):** 10.7 %

**Flammability limit - lower (%):** 0.6 %

**Explosive limit - upper (%):** No data available.

**Explosive limit - lower (%):** No data available.

**Vapor pressure:** < 0.01 mmHg (at 20 °C)

**Vapor density:** 7.0

**Relative density:** 0.98

**Solubility(ies)**

**Solubility in water:** 65 g/L (at 20 °C)

**Solubility (other):** No data available.

**Partition coefficient (n-octanol/water):** 2.9

**Auto-ignition temperature:** 290 °C

**Decomposition temperature:** No data available.

**Viscosity:** 0.056 cP (20 °C)

**Other information**

**Molecular weight:** 204.30

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**Section 10 - Stability and Reactivity**

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**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical Stability:** Material is stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur.

**Conditions to Avoid:** Contact with incompatible materials. Keep away from heat. Keep away from sources of ignition - No smoking.

**Incompatible Materials:** Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products:** Thermal decomposition may release oxides of carbon.

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**Section 11 - Toxicological Information**

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**Information on likely routes of exposure**

**Ingestion:** May cause irritation of the gastrointestinal tract.

**Inhalation:** Spray mists may cause respiratory tract irritation.

**Skin Contact:** May cause irritation.

**Eye contact:** May cause temporary eye irritation.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

**Oral Product:** LD 50 (Rat): 6,500 - 11,920 mg/kg

LD 50 (Mouse): 6,500 - 6,600 mg/kg

LD 50 (Guinea pig): 2,340 mg/kg

LD 50 (Rabbit): 2,260 - 2,800 mg/kg

**Dermal Product:** LD 50 (Rabbit): 5,500 - 14,500 mg/kg

**Inhalation Product:** LC 50 (Rat, 4 h): 73.7 mg/l

**Repeated Dose Toxicity Product:** No data available.

**Skin Corrosion/Irritation Product:** May cause skin irritation.

**Serious Eye Damage/Eye Irritation Product:** May irritate eyes.

**Respiratory or Skin Sensitization Product:** Not a skin sensitizer.

**Carcinogenicity Product:** This substance has no evidence of carcinogenic properties.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

### **Germ Cell Mutagenicity**

**In vitro Product:** No mutagenic components identified

**In vivo Product:** No mutagenic components identified

**Reproductive Toxicity Product:** No components toxic to reproduction

**Specific Target Organ Toxicity - Single Exposure Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure Product:** No data available.

**Aspiration Hazard Product:** Not classified

**Other Effects:** None known.

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## **Section 12 - Ecological Information**

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### **Ecotoxicity:**

#### **Acute hazards to the aquatic environment:**

**Fish Product:** No data available.

**Aquatic Invertebrates Product:** No data available.

#### **Chronic hazards to the aquatic environment:**

**Fish Product:** No data available.

**Aquatic Invertebrates Product:** No data available.

**Toxicity to Aquatic Plants Product:** No data available.

### **Persistence and Degradability**

**Biodegradation Product:** There are no data on the degradability of this product.

**BOD/COD Ratio Product:** No data available.

### **Bioaccumulative Potential**

**Bioconcentration Factor (BCF) Product:** No data available on bioaccumulation.

**Partition Coefficient n-octanol / water (log Kow) Product:** Log Kow: 2.9

**Mobility in Soil:** No data available.

**Other Adverse Effects:** The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

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## **Section 13 - Disposal Considerations**

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**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied.

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## **Section 14 - Transport Information**

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UN Number: Not regulated

Shipping Name: Not applicable

Hazard Class: Not applicable

Packing Group: Not applicable

Marine Pollutant: : No data available

Safety measures : Not applicable

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## Section 15 - Regulatory Information

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### US federal regulations

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

#### CERCLA Hazardous Substance List (40 CFR 302.4):

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

##### Hazard categories

Not listed.

##### SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

##### SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

##### SARA 311/312 Hazardous Chemical

None present or none present in regulated quantities.

##### SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

#### Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

### US State Regulations

#### US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

#### US. New Jersey Worker and Community Right-to-Know Act

ETHANOL, 2-(2-BUTOXYETHOXY)-ACETATE Listed

#### US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

#### US. Pennsylvania RTK - Hazardous Substances

ETHANOL, 2-(2-BUTOXYETHOXY)-ACETATE Listed

#### US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

### Inventory Status:

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

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**Section 16 - Other Information**

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Sources : KOSHA, National Emergency Management Agency

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