



## Safety Data Sheet

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### Section 1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Diethylene glycol mono-n-butyl ether  
SDS No. : 2367E-4

Recommended use of the chemical and restrictions on use

Research and Development

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.  
Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN  
Division: Chemical Safety Management Department  
Telephone number: +81-6-6946-8061  
FAX: +81-6-6946-1607

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### Section 2. Hazards identification

Classification of the substance or mixture

PHYSICAL AND CHEMICAL HAZARDS

Flammable liquids: Category 4

HEALTH HAZARDS

Serious eye damage/eye irritation: Category 2A

Specific target organ toxicity – single exposure: Category 3 (Narcotic effects)

Specific target organ toxicity – repeated exposure: Category 1 (liver, respiratory system)

(Note) GHS classification without description: Not classified/Classification not possible

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements

H227 Combustible liquid

H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness

H372 Causes damage to organs through prolonged or repeated exposure (liver, respiratory system)

Precautionary statements

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P271 Use only outdoors or in a well-ventilated area.

P264 Wash hands thoroughly after handling.

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

P270 Do not eat, drink or smoke when using this product.

Response



P370 + P378 In case of fire: Use appropriate media to extinguish.  
 P314 Get medical advice/attention if you feel unwell.  
 P312 Call a POISON CENTER/doctor if you feel unwell.  
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337 + P313 If eye irritation persists: Get medical advice/attention.

**Storage**

P403 Store in a well-ventilated place.  
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up.

**Disposal**

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Specific danger/hazard****Health hazard**

See "11. Toxicological Information".

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

Substance/mixture:

Substance

Ingredient name	Content (%)	CAS RN	ENCS	Chemical formula
Diethylene glycol mono-n-butyl ether	≥98	112-34-5	2-422;7-97	C8H18O3

Note : The figures shown above are not the specifications of the product.

**Section 4. First aid measures**

Descriptions of first aid measures

**General measures**

Get medical advice/attention if you feel unwell.

**IF INHALED**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

**IF ON SKIN**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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

**IF IN EYES**

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.

**IF SWALLOWED**

Rinse mouth.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.



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**Section 5. Fire-fighting measures**

## Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

In case of fire, use spraying loaded liquid, foam (water-soluble liquid: alcohol-resistant foam), inactive gases, dry powder, dry sand to extinguish.

\*Fire Service Act Group 4 Hazardous Materials

## Unsuitable extinguishing media

Indoor Fire Plug System or Outdoor Fire Plug System

Sprinkler System

Dry Chemical Extinguishing System-Others (except for phosphates etc., Hydrogen Carbonates etc.)

Fire Extinguisher Discharging Jet Water/Spraying Water

Fire Extinguisher Discharging Jet Loaded Liquid

Fire Extinguisher Discharging Dry Extinguishing agents-Others (except for phosphates etc., Hydrogen Carbonates etc.)

Water Bucket or Water Tank

\*Cabinet Order Concerning the Control of Hazardous Materials (Attached Table 5) Group 4 Hazardous Materials

## Specific hazards arising from the substance or mixture

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

See "10.Stability and Reactivity".

## Advice for firefighters

## Special extinguishing method

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

Wear fire resistant or flame retardant clothing.

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

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

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**Section 6. Accidental release measures**

## Personal precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

## Environmental precautions

Prevent spills from entering sewers, watercourses, low areas or rivers. To be careful not discharged to the environment without being properly handled waste water contaminated.

## Methods and materials for containment and cleaning up

Liquid: Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Solid: Sweep up, place in a bag and hold for waste disposal.

## Preventive measures for secondary accident

Collect spillage.



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**Section 7. Handling and storage**

## Handling

## Engineering measures

(Measures to prevent operator exposure)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Measures to prevent fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Local ventilation/general ventilation)

Exhaust/ventilator should be available.

(Precautions)

Avoid contact with skin.

Avoid contact with eyes.

## Advice on safe handling

Use only outdoors or in a well-ventilated area.

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

Wash hands and contaminated parts thoroughly after handling.

When using do not eat, drink or smoke.

## Avoidance of contact

See "10.Stability and Reactivity".

## Advice on general occupational hygiene

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

## Storage

## Conditions for safe storage

Keep container tightly closed.

Store locked up. (P405)

Store in a cool, dry place. Do not store in direct sunlight.

Storage in accordance with local/national regulation.

## Safe packaging material

Use closed unbreakable containers.

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**Section 8. Exposure controls/personal protection**

## Permissible concentration

## Administrative Control Levels and Concentration standard value

Concentration standard value TWA: 60mg/m<sup>3</sup>

## Occupational exposure limit values

## ACGIH

TWA: 10ppm(IFV) (Hematologic, liver & kidney eff)

## Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

## Personal protective equipment

Recommend to use protective equipment in conformity with the standards.

Use appropriate protective equipment in accordance with local/national regulation.

## Respiratory protection

Wear respiratory protection (dust-proof mask/gas mask). Select chemical cartridge



corresponding to type of gases when using a gas mask.

Hand protection

Wear impervious protective glove.

Eye/face protection

Wear eye/face protection. Wear safety goggles in cases gas is generated.

Skin and body protection

Wear protective clothing.

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## Section 9. Physical and Chemical Properties

Physical state: Liquid

Color: Colorless, Clear

Odor: Characteristic odor

Melting point/Freezing point: -68°C

Boiling point or initial boiling point and boiling range: (Diethylene glycol mono-n-butyl ether)230°C

Flammability data is not available.

Lower and upper explosion limit/flammability limit:

Lower explosion limit: 0.8 vol %

Upper explosion limit: 9.4 vol %

Flash point: (Diethylene glycol mono-n-butyl ether)(C.C.) 78°C

Auto-ignition temperature: (Diethylene glycol mono-n-butyl ether)223°C

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: Very good

Solubility in solvent data is not available.

Partition coefficient n-octanol/water (log value): 0.3

Vapor pressure: 3 Pa (20°C)

Density and/or relative density: 0.95

Relative vapor density (Air=1): 5.6

Particle characteristics data is not available.

Other information

Other information is not available.

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## Section 10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

The substance can presumably form explosive peroxides. Reacts with strong oxidants. (ICSC 0788)

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products



Carbon oxides, Explosive peroxides

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**Section 11. Toxicological Information**

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Data for components of the product]

[NITE-CHRIP]

female rat LD50: 5080 mg/kg (source: NITE)

Acute toxicity (Dermal)

[Data for components of the product]

[NITE-CHRIP]

rabbit LD50: 2764 mg/kg (source: NITE)

Skin corrosion/irritation data is not available.

Serious eye damage/irritation

[Product]

Category 2A, Causes serious eye irritation

[Data for components of the product]

[NITE-CHRIP]

Category 2A (source: NITE)

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity data is not available.

Specific target organ toxicity – single exposure

[Product]

Category 3, May cause drowsiness or dizziness

[Data for components of the product]

[NITE-CHRIP]

Category 3 (Narcotic effects) (source: NITE)

Specific target organ toxicity – repeated exposure

[Product]

Category 1, Causes damage to organs through prolonged or repeated exposure

[Data for components of the product]

[NITE-CHRIP]

Category 1 (liver, respiratory system) (source: NITE)

Aspiration hazard data is not available.

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**Section 12. Ecological Information**

Toxicity

Aquatic toxicity

[Data for components of the product]

Hazardous to the aquatic environment, short-term (acute)

[NITE-CHRIP]

Algae (*Desmodesmus subspicatus*) 96-hour EC50: > 100 mg/L (source: NITE)

Crustacea (*Daphnia magna*) 48-hour EC50: > 100 mg/L (source: NITE)

Fish (*Lepomis macrochirus*) 96-hour LC50: 1300 mg/L (source: NITE)

Water solubility



- not poorly water-soluble (1000000 mg/L) (source: NITE)
- Persistence and degradability
  - Persistence and degradability data is not available.
- Bioaccumulative potential
  - [Data for components of the product]
  - log Pow: 0.3 (source: ICSC, 2004)
- Mobility in soil
  - Mobility in soil data is not available.
- Other adverse effects
  - Ozone depleting chemical data is not available.

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**Section 13. Disposal considerations**

- Waste from residues
  - Dispose of contents/container as industrial waste. Accordance with local/national regulation.

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**Section 14. Transport Information**

- UNRTDG
  - UN number : Not regulated
- IMDG Code (International Maritime Dangerous Goods Regulations)
  - UN number : Not regulated
- IATA (Dangerous Goods Regulations)
  - UN number : Not regulated
- Environmental hazards
  - Marine pollutants (yes/no) : no
  - Environmentally hazardous substance/mixture (yes/no) : no

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**Section 15. Regulatory Information**

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - U.S. Toxic Substances Control Act (TSCA) Inventory
    - Chemicals listed in TSCA Inventory
      - Applicable
- Other regulatory information
  - Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

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**Section 16. Other information**

- References and sources for data
  - Globally Harmonized System of classification and labelling of chemicals, UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN IMDG Code, 2024 Edition (Incorporating Amendment 42-24)
  - IATA Dangerous Goods Regulations (67th Edition) 2026
  - 2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
  - 2026 TLVs and BEIs. (ACGIH)
  - JIS Z 7252 : 2019
  - JIS Z 7253 : 2019



Recommendation of occupational exposure limits (2024–2025) (JSOH)

Supplier's data/information

General Disclaimer

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Unauthorized translation or modification is prohibited.

Please provide SDS to customers for selling or transferring.

All chemicals have unknown hazard. Handle the product with care.

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Data published in Japan (National Institute of Technology and Evaluation (NITE) Chemical Risk Information Platform (NITE-CHRIP), up to FY2024).