

Material Safety Data Sheet

Date Created: 03/07/2009

Date Updated: 02/06/2010

Version: 1.0

Section 1 - Product And Company Information

Product Diethylene Glycol Monobutyl Ether (DB)
Product No D017
Company Dynamic N.A. Inc
Address 23 Captains Walk, Milford, CT 06460, U.S.A.
Phone 1 914 965 2077
Fax 1 914 375 2093

Section 2 - Composition/Information On Ingredients

Synonyms 2-(2-Butoxyethoxy)ethanol, Butyldiglycol
CAS # 112-34-5
Formula C₈H₁₈O₃

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

OSHA Hazards: Target Organ Effect, Irritant

Target Organs: Liver, Kidney, Blood

HMIS CLASSIFICATION

Health Hazard: 2

Chronic Health Hazard: *

Flammability: 1

Physical hazards: 0

NFPA RATING

Health Hazard: 2

Fire: 1

Reactivity Hazard: 0

POTENTIAL HEALTH EFFECTS

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

Section 4 - First Aid Measures

GENERAL ADVICE

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

IF INHALED

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

IN CASE OF SKIN CONTACT

Wash off with soap and plenty of water. Consult a physician.

IN CASE OF EYE CONTACT

Flush eyes with water as a precaution.

IF SWALLOWED

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 - Fire Fighting Measures

FLAMMABLE PROPERTIES

Flash point 99 °C (210 °F) - closed cup

Ignition temperature 204 °C (399°F)

SUITABLE EXTINGUISHING MEDIA

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Wear self contained breathing apparatus for fire fighting if necessary.

Section 6 - Accidental Release Measures

PERSONAL PRECAUTIONS

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Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not let product enter drains.

METHODS FOR CLEANING UP

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

HANDLING

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Normal measures for preventive fire protection.

STORAGE

Keep container tightly closed in a dry and well-ventilated place.

Section 8 - Exposure Controls / Personal Protection

Contains no substances with occupational exposure limit values.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

HAND PROTECTION

Handle with gloves.

EYE PROTECTION

Safety glasses

SKIN AND BODY PROTECTION

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

HYGIENE MEASURES

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9 - Physical And Chemical Properties

Appearance	Colorless liquid
Molecular Weight:	162.23 g/mol
pH	n/a
Melting point	-68 °C (-90 °F)
Boiling point	224 - 228 °C (435 - 442 °F)
Flash point	99 °C (210 °F) - closed cup
Ignition temperature	204 °C (399 °F)
Lower explosion limit	0.9 %(V)
Upper explosion limit	6.2 %(V)
Vapour pressure	40 hPa (30 mmHg) at 130 °C (266 °F)
Density	0.953 g/mL at 20 °C (68 °F)
Water solubility	n/a
Partition coefficient	log Pow: 0.56
Relative vapour	5.6
Density	- (Air = 1.0)

Section 10 - Stability and Reactivity

STORAGE STABILITY

Stable under recommended storage conditions.

MATERIALS TO AVOID

Strong oxidizing agents

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HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section 11 - Toxicological Information

ACUTE TOXICITY

LD50 Oral - rat - 5,660 mg/kg

LD50 Dermal - rabbit - 2,700 mg/kg

IRRITATION AND CORROSION

Eyes - rabbit - Moderate eye irritation - 24 h

SENSITISATION

n/a

CHRONIC EXPOSURE

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

POTENTIAL HEALTH EFFECTS

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

Target Organs: Liver, Kidney, Testes.,

ADDITIONAL INFORMATION

RTECS: KJ9100000

Section 12 - Ecological Information

ELIMINATION INFORMATION (persistence and degradability)

Biodegradability

ECOTOXICITY EFFECTS

Toxicity to fish:

LC50 - Lepomis macrochirus - 1,300 mg/l - 96 h

LC0 - Leuciscus idus (Golden orfe) - > 1,000 mg/l - 48 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h

Toxicity to algae:

IC50 - Scenedesmus subspicatus - > 100 mg/l - 24 h

FURTHER INFORMATION ON ECOLOGY

n/a

Section 13 - Disposal Considerations

PRODUCT

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

CONTAMINATED PACKAGING

Dispose of as unused product.

Section 14 - Transport Information

DOT (US)

Not dangerous goods

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IMDG
Not dangerous goods
IATA
Not dangerous goods

Section 15 - Regulatory Information

OSHA HAZARDS

Target Organ Effect, Irritant

DSL STATUS

All components of this product are on the Canadian DSL list.

SARA 302 COMPONENTS

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 COMPONENTS

2-(2-Butoxyethoxy)ethanol CAS-No.:112-34-5

Revision Date:1995-01-01

SARA 311/312 HAZARDS

Acute Health Hazard, Chronic Health Hazard

Section 16 - Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.