

Material Safety Data Sheet

Date Created: 03/07/2009

Date Updated: 06/25/2013

Version: 1.0

Section 1 - Product And Company Information

Product Ethylene glycol Monobutyl ether (EB)
Product No D009
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-Butoxyethanol
CAS # 111-76-2
Formula C₆H₁₄O₂

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Combustible liquid and vapor. May affect the central nervous system causing dizziness, headache or nausea. May be harmful if inhaled. May be harmful if swallowed. May cause eye irritation.

POTENTIAL HEALTH EFFECTS

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

Skin: May cause mild skin irritation.

Eyes: Can cause eye irritation.

Ingestion: May be harmful if swallowed large amounts.

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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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 67 °C (153 °F) - closed cup

Ignition temperature 245 °C (473 °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

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.

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Section 7 - Handling and Storage

HANDLING

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

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

STORAGE

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

Section 8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Eye & Upper Respiratory Tract irritation Confirmed animal carcinogen with unknown relevance to humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

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

Face shield and 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 clear liquid
Molecular Weight:	118.17 g/mol
pH	n/a
Melting point	-75 °C (-103 °F) - lit.
Boiling point	169 - 172.5 °C (336 - 342.5 °F) - lit.
Flash point	67 °C (153 °F) - closed cup
Ignition temperature	245 °C (473 °F)
Lower explosion limit	1.1 %(V)
Upper explosion limit	12.7 %(V)
Vapour pressure	13 hPa (10 mmHg) at 81 °C (178 °F) < 1 hPa (< 1 mmHg) at 20 °C (68 °F)
Density	0.902 g/mL at 25 °C (77 °F)
Water solubility	n/a
Partition coefficient	log Pow: 0.83
Relative vapour	4.08
Density	- (Air = 1.0)

Section 10 - Stability and Reactivity

STORAGE STABILITY

Stable under recommended storage conditions.

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MATERIALS TO AVOID

Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section 11 - Toxicological Information

ACUTE ORAL TOXICITY

LD50 Guinea pig: 1200 mg/kg

ACUTE INHALATION TOXICITY

LC50 Guinea pig: >633 ppm, 1h

ACUTE DERMAL TOXICITY

LD50 Guinea pig: >2000 mg/kg

Section 12 - Ecological Information

ELIMINATION INFORMATION (persistence and degradability)

No data available

ECOTOXICITY EFFECTS

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

FURTHER INFORMATION ON ECOLOGY

No data available

Section 13 - Disposal Considerations

PRODUCT

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.

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

IMDG

Not dangerous goods

IATA

Not dangerous goods

Section 15 - Regulatory Information

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

No data available

CHEMICAL SAFETY ASSESSMENT

No data available

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.