

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number: 111-76-2
Product Name: Glycol ether EB
Revision Date: Dec 15, 2017 **Date Printed:** Sep 23, 2021
Version: 2.1 **Supersedes Date:** Dec 13, 2017
Manufacturer's Name: Thames River Chemical Corp.
Address: 5230 Harvester Road Burlington, ON, CA, L7L 4X4
Emergency Phone: CHEMTREC (800) 424-9300
Information Phone Number: 905-681-5353
Fax: 905-681-5377
Product/Recommended Uses: For laboratory or industrial use only.

SECTION 2) HAZARDS IDENTIFICATION

Classification

Acute toxicity Dermal - Category 4
Acute toxicity Inhalation - Category 4
Acute toxicity Oral - Category 4
Eye Irritation - Category 2
Skin Irritation - Category 2

Pictograms



Signal Word

Warning

Hazard Statements - Health

Harmful in contact with skin
Harmful if inhaled
Harmful if swallowed
Causes serious eye irritation
Causes skin irritation

Precautionary Statements - General

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

Precautionary Statements - Prevention

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

Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wash/Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of water and soap.
Call a POISON CENTER or doctor, if you feel unwell.
Specific treatment (see first-aid on the SDS).
Take off contaminated clothing. And wash it before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF SWALLOWED: Call a POISON CENTER or doctor, if you feel unwell.
Rinse mouth.
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 skin irritation occurs: Get medical advice/attention.

Precautionary Statements - Storage

No precautionary statement available.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/national/international regulation. Waste management should be in full compliance with national, regional and local laws.

Physical Hazards Not Otherwise Classified

No data available.

Health Hazards Not Otherwise Classified

No data available.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000111-76-2	ETHYLENE GLYCOL MONOBUTYL ETHER	100% - 100%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality or to reflect batch to batch variation.

SECTION 4) FIRST-AID MEASURES

Inhalation

Get medical advice/attention if you feel unwell or are concerned. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Remove source of exposure or move person to fresh air and keep comfortable for breathing. Eliminate all ignition sources if safe to do so. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

Eye Contact

If eye irritation persists: Get medical advice/attention. Seek medical attention.

Skin Contact

Store contaminated clothing under water and wash before re-use or discard. Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with water/shower and mild soap for 5 minutes or until product is removed.

Ingestion

Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:

INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Most Important Symptoms and Effects, Both Acute and Delayed

No data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

No data available.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Do NOT direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire.

Water spray or fog.

Foam.

Dry chemical powder.

BCF (where regulations permit). Use caution when applying carbon dioxide in confined spaces. Large Fire: Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Many vapors are heavier than air. Containers may explode in fire. Many liquids are lighter than water. May form an ignitable vapor/air mixture in closed tanks or containers. Runoff to sewer may create fire or explosion hazard. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flashback. Vapors will spread along ground and collect in low or confined areas (sewers, basements, tanks) Polymer: May polymerize explosively when heated or involved in a fire. Fire will produce irritating gases.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Move undamaged containers from immediate hazard area if it can be done safely. Stop spill/release if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product has a low flashpoint: Use of water spray when fighting fire may be inefficient. Nitromethane and nitroethane: Do not use dry chemical extinguishers to control fires. Large Fire: Dike fire-control water for later disposal; do not scatter the material

Special Protective Actions

Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Stay uphill and/or upstream. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Evacuate and isolate hazard area and keep unauthorized personnel away. A vapor-suppressing foam may be used to reduce vapors.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor or mist. Avoid contact with skin, eye or clothing.

Environmental Precautions

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Stop spill/release if it can be done safely. Dike far ahead of liquid spill for later disposal.

Methods and Materials for Containment and Cleaning up

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean, non-sparking tools to collect absorbed material. Ventilate area after clean-up is complete.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use. Do not get in eyes, on skin or on clothing. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. This product is not intended for human or animal

consumption. Use pneumatic and/or mechanical systems for bulk transfer of the substance Use exhaust ventilation and/or dust collecting filters for bulk transfer and storage. Use approved respiratory protection when handling. Keep bulk of materials out of sewer drains.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. Report ventilation failures immediately. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Do not store large quantities of flammable liquids in the same storage cabinet. Store in dry, cool areas, out of direct sunlight and away from other sources of heat. Store in original containers. Keep containers securely sealed. Keep away from incompatible materials (e.g. oxidizers). Store flammable and combustible liquids in areas that are cool, dry and well ventilated to reduce vapour concentrations. Never use plastic or glass containers for storing flammable liquids. Keep containers securely sealed when not in use. Bond and ground metal containers/cylinders when transferring. Avoid storing in direct sunlight or near other heat sources; eliminate all sources of ignition. Cabinets must be labelled; FLAMMABLE - KEEP FIRE AWAY. Avoid storing in basements. Protect containers against banging or other physical damage when storing, transferring, or using them.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear indirect-vent, impact and splash resistant goggles when working with liquids

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	CANsmg	CANspgm	CANtmg	CANtppm	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)
ETHYLENE GLYCOL MONOBUTYL ETHER	360	75	120	25			240	50

Chemical Name	OSHA Carcinogen	OSHA Tables (Z1, Z2, Z3)	OSHA Skin designation	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH TLV Basis
ETHYLENE GLYCOL MONOBUTYL ETHER		1	1				20	Eye & URT irr

Chemical Name	ACGIH Carcinogen	ACGIH Notations
ETHYLENE GLYCOL MONOBUTYL ETHER	A3	A3; BEI

A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, BEI - Substances for which there is a Biological Exposure Index or Indices, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	7.52 lb/gal
Specific Gravity	0.90
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Appearance	clear, colourless liquid
Coefficient Water/Oil	log Pow: 0.81 (20 °C) (n-octanol/water)
Evaporation Rate	< 1 (n-Butyl Acetate = 1)
Flash Point	67.00 °C
High Boiling Point	N/A
Low Boiling Point	171.00 °C
Lower Explosion Level	N/A
Melting Point	-75.00 °C
Odor Description	mild pleasant ether odour
Odor Threshold	0.10 - 0.48 mg/l
pH	N/A
Upper Explosion Level	N/A
Vapor Density	4 (air=1)
Vapor Pressure	1.17 hPa (25 °C)
Viscosity	3.3 mPa.s (20 °C)
Water Solubility	900 g/l completely soluble

SECTION 10) STABILITY AND REACTIVITY

Reactivity

No data available.

Stability

Stable under normal storage and handling conditions.

Conditions to Avoid

No data available

Hazardous Reactions/Polymerization

Hazardous polymerization will not occur.

Incompatible Materials

Strong oxidizing agents

Hazardous Decomposition Products

No data available.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure

Inhalation, ingestion, skin absorption

Acute Toxicity

Harmful in contact with skin

Harmful if inhaled

Harmful if swallowed

Aspiration Hazard

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive Toxicity

Based on available data, the classification criteria are not met.

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Can irritate the respiratory tract.

Respiratory/Skin Sensitization

Based on available data, the classification criteria are not met.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can irritate the eyes.

Can irritate the respiratory tract.

Serious Eye Damage/Irritation

Causes serious eye irritation

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can irritate the eyes.

Can irritate the skin.

Skin Corrosion/Irritation

Causes skin irritation

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can irritate the skin.

May affect the central nervous system, blood, kidneys and liver. Exposure can cause headache, dizziness and lightheadedness.

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

May affect the central nervous system, blood, kidneys and liver. Exposure can cause headache, dizziness and lightheadedness.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

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The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

Potential Health Effects - Miscellaneous

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can be absorbed through the skin in harmful amounts. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

LC50 (female rat): 450 ppm (4-hour exposure) (2)

LC50 (male rat): 486 ppm (4-hour exposure) (2)

LD50 (oral, male weanling rat): 3000 mg/kg (1)

LD50 (oral, 6-week old male rat): 2400 mg/kg (1)

LD50 (oral, yearling male rat): 560 mg/kg (1)

LD50 (oral, female rat): 530 mg/kg; 2500 mg/kg (1) LD50 (oral, male mouse): 1230 mg/kg (1)

LD50 (oral, rabbit): 320 mg/kg (1)

LD50 (dermal, male rabbit): 406 mg/kg (cited as 0.45 mL/kg) (1)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Based on available data, the classification criteria are not met.

Mobility in Soil

No data available.

Bioaccumulative Potential

No data available.

Persistence and Degradability

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Readily biodegradable

Readily biodegradable.

Other Adverse Effects

No data available.

Results of the PBT and vPvB assessment

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

The substance is not PBT / vPvB

The substance is not PBT / vPvB.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, provincial and local laws.

SECTION 14) TRANSPORT INFORMATION

	Transport Canada Information	U.S. DOT Information
UN number:	Not Regulated	Not Regulated
Proper shipping name:	N/A (ETHYLENE GLYCOL MONOBUTYL ETHER)	N/A (ETHYLENE GLYCOL MONOBUTYL ETHER)
Hazard class:	Not Applicable	
Hazard class:		Not Applicable
Packaging group:	Not Applicable	Not Applicable
Hazardous substance (RQ):		No Data Available
Marine Pollutant:	No Data Available	No Data Available
Note / Special Provision:	Note / Special Provision	No Data Available
Toxic-Inhalation Hazard:		No Data Available
Transport in bulk (according to Annex II of MARPOL 73/78):	No Data Available	

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000111-76-2	ETHYLENE GLYCOL MONOBUTYL ETHER	100% - 100%	DSL,TSCA,EU_EC_Inventory - European_EC_Inventory

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CANsmg or CANspmm - Canadian Short Term Exposure Level in mg/L or in ppm; CANtmg or CANtpmm - Canadian Time Weighted Average in mg/L or in ppm; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

Version 2.1:

Revision Date: Dec 15, 2017

Most recent manufacturer SDS data used to update section 9 and transportation information

Version 2.0:

Revision Date: Oct 13, 2017

Hazards classifications, section 9 data, and transport information updated based on supplier data

Version 1.0:

Revision Date: Oct 13, 2017

Version 1.0; ; ;

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