

# SAFETY DATA SHEET

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Revision Date: 01/13/2010

Print Date:

MSDS Number: R0000694

Version: 1.11

GLYCOL ETHER EB 103067

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

COMPANY IDENTITY: Cumberland Products, Inc.  
COMPANY ADDRESS: 50 Commerce Parkway  
Hodgenville, KY 42748  
COMPANY PHONE: 1-800-223-1918  
CHEMTREC PHONE: 1-800-424-9300

Product name GLYCOL ETHER EB  
Product code 103067  
Product Use Description Cleaner for removal of vegetable or animal oil from soiled surfaces.

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Appearance: liquid, colourless

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

#### **Exposure routes**

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

#### **Eye contact**

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

#### **Skin contact**

May cause mild skin irritation. Symptoms may include redness and burning of skin.

#### **Ingestion**

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

#### **Inhalation**

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing this material may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

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## Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions), Liver, kidney

## Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), Difficulty in breathing, Bloody urine, blood abnormalities (breakage of red blood cells), kidney damage, liver damage, coma, and death

## Target Organs

Acute lethal exposure to ethylene glycol monobutyl ether in animal studies has resulted in congestion of organs including kidney, spleen, and lung., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities

## Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA). Ethylene glycol monobutyl ether has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain.

## Reproductive hazard

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Components            | CAS-No.  | Concentration |
|---------------------------------|----------|---------------|
| ETHYLENE GLYCOL MONOBUTYL ETHER | 111-76-2 | >=90-<=100%   |

### 4. FIRST AID MEASURES

#### Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

#### Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

#### Ingestion

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Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

## Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

## Notes to physician

**Hazards:** No information available.

**Treatment:** No information available.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Dry chemical, Carbon dioxide (CO<sub>2</sub>), Water spray, Alcohol-resistant foam

### Hazardous combustion products

carbon dioxide and carbon monoxide

### Precautions for fire-fighting

If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. May form explosive peroxides. Forms peroxides of unknown stability. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

### NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIA

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

For personal protection see section 8. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks).

### Environmental precautions

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No data

## Methods for cleaning up

Per good environmental management practices, prevent run-off to sewers, streams and other bodies of water. Stop spill at the source. Cover sewer grates and dike the spill. Absorb spilled material on to absorbents. Shovel materials into container. Close container tightly and dispose of properly. Absorb onto sand or other absorbent material.

## 7. HANDLING AND STORAGE

### Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Under oxidation conditions, peroxides may be formed. If they become concentrated, these peroxides may present an explosion hazard. Do not store near high heat or open flames.

### Storage

Store in a cool, dry, ventilated area. Store in closed containers in a dry, well-ventilated area. Store out of direct sunlight.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| ETHYLENE GLYCOL MONOBUTYL ETHER |                                   | 111-76-2              |
|---------------------------------|-----------------------------------|-----------------------|
| ACGIH                           | time weighted average             | 20 ppm                |
| NIOSH                           | Recommended exposure limit (REL): | 5 ppm                 |
| NIOSH                           | Recommended exposure limit (REL): | 24 mg/m <sup>3</sup>  |
| OSHA Z1                         | Permissible exposure limit        | 50 ppm                |
| OSHA Z1                         | Permissible exposure limit        | 240 mg/m <sup>3</sup> |

### General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect

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exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

## Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

## Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

## Skin and body protection

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves such as:

- Natural Rubber
- Neoprene
- Nitrile rubber

## Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |                          |
|--|--------------------------|
| <b>Physical state</b>                              | liquid                   |
| <b>Form</b>  | liquid                   |
| <b>Colour</b>                                      | colourless               |
| <b>Odour</b>                                       | No data                  |
| <b>Boiling point/boiling range</b>                 | 171.00 - 172.00 °C       |
| <b>Melting point/range</b>                         | -94 °F / -70 °C          |
| <b>pH</b>  | 7                        |
| <b>Flash point</b>                                 | 61.70 °C Closed Cup      |
| <b>Evaporation rate</b>                            | 0.08 (n-butyl acetate=1) |
| <b>Lower explosion limit/Upper explosion limit</b> | 1.1 %(V) / 10.6 %(V)     |

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|   |  |
|---|--|
| <b>Vapour pressure</b>                        | 0.117 kPa @ 25 °C  |
| <b>Vapour density</b>                         | 4.1 (AIR=1)  |
| <b>Density</b>                                | 0.9 g/cm <sup>3</sup> @ 68.0 °F / 20.0 °C<br>7.51 lb/gal @ 68.00 °F / 20.00 °C |
| <b>Solubility</b>                             | completely miscible in water   |
| <b>Partition coefficient: n-octanol/water</b> | No data  |
| <b>log Pow</b>                                | 0.83   |
| <b>Autoignition temperature</b>               | 460 °F / 238 °C  |

## 10. STABILITY AND REACTIVITY

### Stability

Stable.

### Conditions to avoid

heat

### Incompatible products

aluminum, salts of strong bases, Strong acids, strong alkalis, Strong oxidizing agents

### Hazardous decomposition products

Aldehydes, ketones, Organic acids, carbon dioxide and carbon monoxide

### Hazardous reactions

Product will not undergo hazardous polymerization.

### Thermal decomposition

No data

## 11. TOXICOLOGICAL INFORMATION

|                                  |                                    |
|----------------------------------|------------------------------------|
| <b>Acute oral toxicity</b>       | : LD 50 Guinea pig: 1,200 mg/kg    |
| <b>Acute inhalation toxicity</b> | : LC 50 Guinea pig: > 633 ppm, 1 h |
| <b>Acute dermal toxicity</b>     | : LD 50 Guinea pig: > 2,000 mg/kg  |

## 12. ECOLOGICAL INFORMATION

### Biodegradability

ETHYLENE GLYCOL MONOBUTYL ETHER : no data available

### Bioaccumulation

ETHYLENE GLYCOL MONOBUTYL ETHER : no data available

### Ecotoxicity effects

#### Toxicity to fish

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ETHYLENE GLYCOL MONOBUTYL ETHER : no data available

### Toxicity to daphnia and other aquatic invertebrates.

ETHYLENE GLYCOL MONOBUTYL ETHER : no data available

### Toxicity to algae

ETHYLENE GLYCOL MONOBUTYL ETHER : no data available

### Toxicity to bacteria

ETHYLENE GLYCOL MONOBUTYL ETHER : no data available

### Biochemical Oxygen Demand (BOD)

ETHYLENE GLYCOL MONOBUTYL ETHER : no data available

### Chemical Oxygen Demand (COD)

ETHYLENE GLYCOL MONOBUTYL ETHER : no data available

### Additional ecological information

ETHYLENE GLYCOL MONOBUTYL ETHER : no data available

## 13. DISPOSAL CONSIDERATIONS

### Waste disposal methods

Destroy by incineration in accordance with applicable regulations.

## 14. TRANSPORT INFORMATION

### REGULATION

| ID NUMBER | PROPER SHIPPING NAME | *HAZARD CLASS | SUBSIDIARY HAZARDS | PACKING GROUP | MARINE POLLUTANT / LTD. QTY. |
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|

### U.S. DOT - ROAD

|    |      |  |     |  |     |  |
|----|------|--|-----|--|-----|--|
| NA | 1993 | Combustible liquid, n.o.s. (BUTOXYETHANOL) | CBL |  | III |  |
|----|------|--|-----|--|-----|--|

### U.S. DOT - RAIL

|    |      |  |     |  |     |  |
|----|------|--|-----|--|-----|--|
| NA | 1993 | Combustible liquid, n.o.s. (BUTOXYETHANOL) | CBL |  | III |  |
|----|------|--|-----|--|-----|--|

### U.S. DOT - INLAND WATERWAYS

|    |      |  |     |  |     |  |
|----|------|--|-----|--|-----|--|
| NA | 1993 | Combustible liquid, n.o.s. (BUTOXYETHANOL) | CBL |  | III |  |
|----|------|--|-----|--|-----|--|

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## TRANSPORT CANADA - ROAD

|  |  |                     |  |  |  |  |
|--|--|---------------------|--|--|--|--|
|  |  | Not dangerous goods |  |  |  |  |
|--|--|---------------------|--|--|--|--|

## TRANSPORT CANADA - RAIL

|  |  |                     |  |  |  |  |
|--|--|---------------------|--|--|--|--|
|  |  | Not dangerous goods |  |  |  |  |
|--|--|---------------------|--|--|--|--|

## TRANSPORT CANADA - INLAND WATERWAYS

|  |  |                     |  |  |  |  |
|--|--|---------------------|--|--|--|--|
|  |  | Not dangerous goods |  |  |  |  |
|--|--|---------------------|--|--|--|--|

## INTERNATIONAL MARITIME DANGEROUS GOODS

|  |  |                     |  |  |  |  |
|--|--|---------------------|--|--|--|--|
|  |  | Not dangerous goods |  |  |  |  |
|--|--|---------------------|--|--|--|--|

## INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

|  |  |                     |  |  |  |  |
|--|--|---------------------|--|--|--|--|
|  |  | Not dangerous goods |  |  |  |  |
|--|--|---------------------|--|--|--|--|

## INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

|  |  |                     |  |  |  |  |
|--|--|---------------------|--|--|--|--|
|  |  | Not dangerous goods |  |  |  |  |
|--|--|---------------------|--|--|--|--|

## MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

|  |  |                     |  |  |  |  |
|--|--|---------------------|--|--|--|--|
|  |  | Not dangerous goods |  |  |  |  |
|--|--|---------------------|--|--|--|--|

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

## 15. REGULATORY INFORMATION

### California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

### SARA Hazard Classification

Fire Hazard

Acute Health Hazard

### SARA 313 Component(s)

ETHYLENE GLYCOL MONOBUTYL ETHER

99.00 %

### New Jersey RTK Label Information

ETHYLENE GLYCOL MONOBUTYL ETHER

111-76-2

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**Pennsylvania RTK Label Information**

ETHYLENE GLYCOL MONOBUTYL ETHER 111-76-2

**Notification status**

Australia. Industrial Chemical (Notification and Assessment) Act y (positive listing)  
 Canada. Canadian Environmental Protection Act (CEPA). y (positive listing)  
 Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)  
 China. Inventory of Existing Chemical Substances y (positive listing)  
 Japan. Kashin-Hou Law List y (positive listing)  
 US. Toxic Substances Control Act y (positive listing)  
 EU. EINECS y (positive listing)  
 Korea. Toxic Chemical Control Law (TCCL) List y (positive listing)  
 Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act y (positive listing)  
 Japan. Industrial Safety & Health Law (ISHL) List y (positive listing)  
 Japan. Industrial Safety & Health Law (ISHL) List y (positive listing)  
 Japan. Industrial Safety & Health Law (ISHL) List y (positive listing)  
 New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand y (positive listing)  
 Switzerland. Consolidated Inventory y (positive listing)

**Reportable quantity - Product**

US. EPA CERCLA Hazardous Substances (40 CFR 302) 555555 lbs

**Reportable quantity-Components**

ETHYLENE GLYCOL 107-21-1 5000 lbs

| HMIS and NFPA Codes | HMIS | NFPA |
|---------------------|------|------|
| Health              | 2    | 2    |
| Flammability        | 2    | 2    |
| Physical hazards    | 0    |      |
| Instability         |      | 0    |
| Specific Hazard     | --   | --   |

**16. OTHER INFORMATION**

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.