1. Identification

Product identifier: VERSAFOAM® PLUS

Other means of identification: None.

Recommended use: Not available.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer:
- Company name: CETCO, an MTI Company
- Address: 2870 Forbs Avenue, Hoffman Estates, IL 60192, United States
- Telephone: General Information 800 527-9948
- Website: http://www.cetco.com/
- E-mail: safetydata@mineralstech.com

Emergency phone number:
- Emergency: 1.866.519.4752/1 760 476 3962

Supplier: Not available.

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards:
- Acute toxicity, oral: Category 4
- Acute toxicity, dermal: Category 4
- Skin corrosion/irritation: Category 2
- Serious eye damage/eye irritation: Category 2

Environmental hazards: Not classified.

Label elements

Signal word: Warning

Hazard statement: Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation.

Precautionary statement

Prevention
- Keep out of reach of children. Read label before use. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves/protective clothing.

Response
- If medical advice is needed, have product container or label at hand. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use to extinguish.

Storage
- Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store away from incompatible materials.

Disposal
- Dispose of contents/container in accordance with local regulation.

Other hazards: None known.

Supplemental information
- 25% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.
### 3. Composition/information on ingredients

#### Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL</td>
<td></td>
<td>111-76-2</td>
<td>20 - &lt; 30</td>
</tr>
<tr>
<td>MONOBUTYL ETHER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diethylene Glycol &amp; Higher Glycols</td>
<td></td>
<td>111-46-6</td>
<td>5 - &lt; 10</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>70 - &lt; 80</td>
</tr>
</tbody>
</table>

DSD: Directive 67/548/EEC.
#: This substance has been assigned Community workplace exposure limit(s).
M: M-factor
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. *Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### Composition comments

The full text for all R- and H-phrases is displayed in section 16.

### 4. First-aid measures

#### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

#### Skin contact

Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. For minor skin contact, avoid spreading material on unaffected skin. Wash contaminated clothing before reuse. Wash clothing separately before reuse.

#### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

In case of shortness of breath, give oxygen. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Keep victim under observation. Keep victim warm.

### 5. Fire-fighting measures

#### Suitable extinguishing media

Alcohol resistant foam. Powder. Carbon dioxide (CO2).

#### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

#### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

#### Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

#### Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

#### General fire hazards

No unusual fire or explosion hazards noted.
6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

Use water spray to reduce vapors or divert vapor cloud drift.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Environmental precautions**

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

**Precautions for safe handling**

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not get this material on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Do not use in areas without adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Keep locked up. Store in original tightly closed container. Store in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Canada. Alberta OELs (Occupational Health &amp; Safety Code, Schedule 1, Table 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)</td>
<td>TWA</td>
<td>97 mg/m3</td>
</tr>
<tr>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
</tbody>
</table>
Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)</td>
<td>TWA</td>
<td>97 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Biological limit values**

<table>
<thead>
<tr>
<th>ACGIH Biological Exposure Indices Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)</td>
<td>200 mg/g</td>
<td>Butoxyacetic acid (BAA), with hydrolysis</td>
<td>Creatinine in urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

**Individual protection measures, such as personal protective equipment**

- **Eye/face protection**
  - Face shield is recommended. Face-shield. Chemical respirator with organic vapor cartridge and full facepiece.

- **Skin protection**
  - Hand protection
    - Wear appropriate chemical resistant gloves.
  - Other
    - Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

- **Respiratory protection**
  - Chemical respirator with organic vapor cartridge and full facepiece.

- **Thermal hazards**
  - Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

- **Appearance**
  - Liquid.

- **Physical state**
  - Liquid.

- **Form**
  - Liquid.

- **Color**
  - Clear colorless or nearly colorless light yellow

- **Odor**
  - Lemon

- **Odor threshold**
  - Not available.

- **pH**
  - 7.5 - 8.5 10% solution

- **Melting point/freezing point**
  - -79.46 °F (-61.92 °C) estimated

- **Initial boiling point and boiling range**
  - 362.98 °F (183.88 °C) estimated

- **Flash point**
  - > 202.0 °F (> 94.4 °C) Pensky-Martens Closed Cup estimated

- **Evaporation rate**
  - Not available.

- **Flammability (solid, gas)**
  - Not applicable.

- **Upper/lower flammability or explosive limits**
  - Flammability limit - lower (%)
    - Not available.
  - Flammability limit - upper (%)
    - Not available.
  - Explosive limit - lower (%)
    - Not available.
  - Explosive limit - upper (%)
    - Not available.

- **Vapor pressure**
  - 0.94 hPa estimated

- **Vapor density**
  - Not available.
Relative density
Solubility(ies)
  Solubility (water) Partially
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature 457.12 °F (236.18 °C) estimated
Decomposition temperature Not available.
Viscosity Not available.
Other information
  Density 0.96 g/cm³ estimated
Explosive properties Not explosive.
Flammability class Combustible IIIB estimated
Oxidizing properties Not oxidizing.
Percent volatile 25 % estimated
Specific gravity 0.96 estimated

10. Stability and reactivity
Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
  Inhalation May cause damage to organs by inhalation. Prolonged inhalation may be harmful.
  Skin contact Harmful in contact with skin. Causes skin irritation.
  Eye contact Causes serious eye irritation.
  Ingestion Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects
Acute toxicity Harmful in contact with skin. Harmful if swallowed.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETH (CAS 111-76-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>220 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>2270 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>2.21 mg/l/4h</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>470 mg/kg</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Causes skin irritation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Causes serious eye irritation.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Respiratory or skin sensitization

Canada - Alberta OELs: Irritant
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2) Irritant

Respiratory sensitization Not a respiratory sensitizer.
Skin sensitization This product is not expected to cause skin sensitization.

Skin sensitization
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

ACGIH Carcinogens
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2) A3 Confirmed animal carcinogen with unknown relevance to humans.

Canada - Manitoba OELs: carcinogenicity
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2) Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects May be harmful if absorbed through skin. Prolonged inhalation may be harmful.
2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.
Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene Glycol &amp; Higher Glycols (CAS 111-46-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Fish</td>
<td>LC50</td>
<td>Western mosquitofish (Gambusia affinis) &gt; 32000 mg/l, 96 hours</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Fish</td>
<td>LC50</td>
<td>Fish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inland silverside (Menidia beryllina) 1250 mg/l, 96 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1490 mg/L, 96 Hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)
ETHYLENE GLYCOL MONOBUTYL ETHER 0.83

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not established.

General information
Ensure compliance with applicable regulations.

15. Regulatory information

Canadian regulations
This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act
Not regulated.

Export Control List (CEPA 1999, Schedule 3)
Not listed.

Greenhouse Gases
Not listed.

Precursor Control Regulations
Not regulated.

International regulations

Stockholm Convention
Not applicable.

Rotterdam Convention
Not applicable.

Kyoto protocol
Not applicable.

Montreal Protocol
Not applicable.

Basel Convention
Not applicable.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Toxic Chemical Substances (TCS)</td>
<td>No</td>
</tr>
</tbody>
</table>
Country(s) or region | Inventory name | On inventory (yes/no)*
--- | --- | ---
United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

### 16. Other information

<table>
<thead>
<tr>
<th>Issue date</th>
<th>Revision date</th>
<th>Version #</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-May-2018</td>
<td>11-May-2018</td>
<td>06</td>
</tr>
</tbody>
</table>

**References**
- ACGIH
- EPA: AQUIRE database
- NLM: Hazardous Substances Data Base
- US. IARC Monographs on Occupational Exposures to Chemical Agents

**Disclaimer**
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This safety data sheet was prepared in accordance with JIS Z 7253:2012. Additional information is given in the Material Safety Data Sheet. CETCO, an MTI Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

**Revision information**
- Hazard(s) identification: Hazard statement
- Hazard(s) identification: Prevention
- Composition / Information on Ingredients: Ingredients
- Physical & Chemical Properties: Multiple Properties
- Toxicological information: Acute toxicity
- Toxicological information: Skin contact
- Ecological information: Ecotoxicity
- GHS: Classification