1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Product Name

Other means of identification
Product Code
Synonyms

Details of the supplier of the safety data sheet
Company Name
Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification
OSHA Regulatory Status
This product has been classified in accordance with the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral
Acute toxicity - Dermal

Label elements

Emergency Overview

Appearance
Physical state
Odor

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
Specific Treatment (See Section 4 on the SDS)

Hazards not otherwise classified (HNOC)
Other Information
Unknown Acute Toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|---------------|---------|----------|--------------|--------------|
|               |         |          |              |              |
|               |         |          |              |              |
|               |         |          |              |              |
4. FIRST AID MEASURES

First aid measures

Skin Contact
Wash off immediately with plenty of water. Wash skin with soap and water.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Inhalation
Remove to fresh air.

Ingestion
Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms
Any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No Information available.

Explosion data
Sensitivity to Mechanical Impact: None.
Sensitivity to Static Discharge: None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions
See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling
Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol 112-34-5</td>
<td>TWA: 10 ppm inhalable fraction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and vapor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses if handling large volume.

Skin and body protection
Rubber gloves. Other protective equipment not required under normal use.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear Green</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Green</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Cherry Almond</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>10.0 - 12.0</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.003</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>Water Thin</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>212 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No Information available</td>
<td></td>
</tr>
</tbody>
</table>

Other Information
Density Lbs/Gal 8.35  
VOC Content (%) 1.25

### 10. STABILITY AND REACTIVITY

**Reactivity**
No data available

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**
None under normal processing.

**Conditions to avoid**
Extremes of temperature and direct sunlight.

**Incompatible materials**
None known based on information supplied.

**Hazardous Decomposition Products**
None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**
Harmful by inhalation, ingestion, in contact with eyes and skin.

**Inhalation**
Avoid breathing vapors or mists. Inhalation of vapors in high concentration may cause irritation of respiratory system.

**Eye contact**
Contact with eyes may cause irritation.

**Skin Contact**
May cause irritation. Prolonged skin contact may defat the skin and produce dermatitis.

**Ingestion**
May cause stomach distress, nausea, or vomiting.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol 112-34-5</td>
<td>= 5660 mg/kg (Rat)</td>
<td>= 2700 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

**Information on toxicological effects**

**Symptoms**
No Information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization**
No Information available.

**Germ cell mutagenicity**
No Information available.

**Carcinogenicity**
No Information available.

**Reproductive toxicity**
No Information available.

**STOT - single exposure**
No Information available.

**STOT - repeated exposure**
No Information available.

**Aspiration hazard**
No Information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity**
0% of the mixture consists of ingredient(s) of unknown toxicity

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
0.75% of the mixture consists of components(s) of unknown hazards to the aquatic environment
### 1. Chemical Name

- **2-(2-butoxyethoxy)ethanol**
  - **Chemical Name**: 2-(2-butoxyethoxy)ethanol
  - **CAS Number**: 112-34-5
  - **EC50**: 100: 96 h Desmodesmus subspicatus mg/L
  - **LC50 static**: 1300: 96 h Lepomis macrochirus mg/L
  - **EC50**: 2850: 24 h Daphnia magna mg/L EC50
  - **LC50**: 5.3: 48 h Daphnia magna mg/L LC50

### 2. Persistence and degradability

No Information available.

### 3. Bioaccumulation

No Information available.

### 4. Other adverse effects

No Information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

### 14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment.

**DOT**

Not regulated

**TDG**

Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

- **TSCA**: Complies
- **DSL/NDSL**: Complies

**Legend:**

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol - 112-34-5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**SARA 311/312 Hazard Categories**

- Acute health hazard: No
- Chronic Health Hazard: No
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

**CWA (Clean Water Act)**
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations**

**California Proposition 65**
This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>112-34-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**U.S. EPA Label Information**
EPA Pesticide Registration Number  Not Applicable

**16. OTHER INFORMATION**

**NFPA**
Health hazards 0  Flammability 0  Instability 0  Physical and Chemical Properties Yes

**HMIS**
Health hazards 0  Flammability 0  Physical hazards 0  Personal protection B

**Issue Date**  14-Mar-2016
**Revision Date**  13-Jan-2015
**Revision Note**  No Information available
**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 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.

End of Safety Data Sheet