1. IDENTIFICATION

Product identifier
Product Name TP-95®

Other means of identification
Product Code A183
Synonyms Bis(2-(2-Butoxyethoxy)Ethyl Adipate

Recommended use of the chemical and restrictions on use
Recommended Use Industrial.

Details of the supplier of the safety data sheet
Manufacturer Address The Hallstar Company
120 S. Riverside Plaza, Suite 1620
Chicago, IL 60606
Telephone: (877) 427-4255

Emergency telephone number
Company Phone Number (708) 594-5999
Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Appearance amber liquid Physical state liquid Odor slight odor

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Synonyms Bis(2-(2-Butoxyethoxy)Ethyl Adipate.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibutoxyethoxyethyl Adipate</td>
<td>141-17-3</td>
<td>91-99</td>
<td>*</td>
</tr>
<tr>
<td>Glycol Ether</td>
<td>Proprietary</td>
<td>&lt;10</td>
<td>*</td>
</tr>
</tbody>
</table>

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES
Description of first aid measures

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

Skin contact  
Wash skin with soap and water.

Inhalation  
Remove to fresh air.

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

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Dry chemical, CO2, water spray or regular foam.

Specific hazards arising from the chemical
No information available.

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
Steps to be Taken in Case Material is Released or Spilled: Dike and contain the spill with inert material (ie: sand, earth, sawdust) and transfer liquid and solid digging material to separate containers for recovery or disposal. Wash floor area with hotwater solution. Remove contaminated clothing and wash before reuse. Wash affected skin areas with soap and water. Keep spills out of all sewers and bodies of water.

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  
Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines  
This mixture contains one component that has exposure limits. Care should be taken to ensure employee exposure is below limits and/or to protect the worker.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycol Ether</td>
<td>TWA: 10 ppm inhalable fraction and vapor</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

**Engineering Controls**
- Showers
- Eyewash stations
- Ventilation systems.

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

**Eye/face protection**
Wear safety glasses with side shields (or goggles).

**Skin and body protection**
Wear protective nitrile rubber gloves.

**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 Considerations**
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>amber liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td>Odor threshold No information available</td>
</tr>
<tr>
<td>Odor</td>
<td>slight odor</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>180 °C</td>
<td>Cleveland Open Cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit 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>Relative density</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

**Other Information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC Content (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
</tr>
<tr>
<td>Volatility</td>
<td>No information available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Reactivity**
Reacts with strong oxidizers.

**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**
Strong oxidizing agents.

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

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<table>
<thead>
<tr>
<th>Product Information</th>
<th>Inhalation</th>
<th>Eye contact</th>
<th>Skin contact</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td>No data available.</td>
<td>No data available.</td>
<td>No data available.</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibutoxyethoxyethyl Adipate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>141-17-3</td>
<td>= 6 g/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Glycol Ether</td>
<td>= 5660 mg/kg (Rat)</td>
<td>= 2700 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

**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.

The following values are calculated based on chapter 3.1 of the GHS document.

- ATEmix (oral): 5,777.00
- ATEmix (dermal): 54,000.00

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycol Ether</td>
<td>100: 96 h Desmodesmus subspicatus mg/L EC50</td>
<td>1300: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>100: 48 h Daphnia magna mg/L EC50 2850: 24 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
No information available.

**Bioaccumulation**
No information available.

**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

DOT  Not regulated

ICAO (air)  Not regulated

IMDG  Not regulated

15. REGULATORY INFORMATION

International Inventories

Legend:
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

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>Dibutoxyethoxyethyl Adipate - 141-17-3</td>
<td>1.0</td>
</tr>
<tr>
<td>Glycol Ether -</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)

CERCLA

US State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<table>
<thead>
<tr>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Prepared By: AAC  
Issue Date: 08-May-2015  
Revision Date: 14-Nov-2018  
Revision Note: No information available

**Disclaimer**
The information provided in this Material 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