Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code  A182
Product Name  TP-90B®
Chemical Name  Hexaoxatricosane

1.2. Relevant identified uses of the substance or mixture and uses advised against

Sold to the general public  No
Recommended Use  Plasticiser for PVC

1.3. Details of the supplier of the safety data sheet

Manufacturer  The HallStar Company
The HallStar Company
120 S. Riverside Plaza, Suite 1620
Chicago, IL 60606 USA
PH: 877-427-4255

For further information, please contact
E-mail address  customerservice@hallstar.com

1.4. Emergency telephone number

Emergency Telephone  Chemtrec 1-800-424-9300
Emergency Telephone - (800) 424-9300
Europe  +1 (703) 527 3887

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

Product identifier
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances
**Section 4: FIRST AID MEASURES**

4.1. Description of first aid measures

Inhalation
Remove to fresh air.

Skin contact
Remove contaminated clothing and shoes. Wash skin with soap and water. (Get medical attention immediately if symptoms occur.).

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

Ingestion
Drink 1 or 2 glasses of water. Call a physician.

4.2. Most important symptoms and effects, both acute and delayed

**Section 5: FIRE FIGHTING MEASURES**

5.1. Extinguishing media
Suitable extinguishing media
Carbon dioxide (CO2). Dry chemical. Water spray, fog or regular foam.

5.2. Special hazards arising from the substance or mixture
Thermal decomposition can lead to release of irritating and toxic gases and vapors

5.3. Advice for firefighters
Wear self-contained breathing apparatus and protective suit.

**Section 6: ACCIDENTAL RELEASE MEASURES**

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
Ensure adequate ventilation, especially in confined areas.

For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental precautions
Collect spillage.

6.3. Methods and material for containment and cleaning up

Methods for containment
Dike for later disposal and cover with wet sand or earth. Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g.
Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep container tightly closed. Keep from freezing.

Incompatible materials

None known based on information supplied.

7.3. Specific end use(s)

Risk Management Methods (RMM)

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>European Union</th>
<th>United Kingdom</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
</tr>
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<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>TWA: 10 ppm</td>
<td>TWA: 10 ppm</td>
<td>TWA: 10 ppm</td>
<td>TWA: 10 ppm</td>
<td>TWA: 10 ppm</td>
</tr>
<tr>
<td>112-34-5</td>
<td>TWA: 67.5 mg/m³</td>
<td>TWA: 67.5 mg/m³</td>
<td>TWA: 67.5 mg/m³</td>
<td>TWA: 67.5 mg/m³</td>
<td>TWA: 67 mg/m³</td>
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<td>STEL: 15 ppm</td>
<td>STEL: 15 ppm</td>
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<tr>
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<td>STEL: 101.2 mg/m³</td>
<td>STEL: 101.2 mg/m³</td>
<td>STEL: 101.2 mg/m³</td>
<td>STEL: 101.2 mg/m³</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Italy</td>
<td>Portugal</td>
<td>Netherlands</td>
<td>Finland</td>
<td>Denmark</td>
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<td>Diethylene glycol monobutyl ether</td>
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<td>TWA: 67.5 mg/m³</td>
<td>TWA: 67.5 mg/m³</td>
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<tr>
<td></td>
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<td>STEL: 15 ppm</td>
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<tr>
<td></td>
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<td>STEL: 101.2 mg/m³</td>
<td>STEL: 101 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Austria</td>
<td>Switzerland</td>
<td>Poland</td>
<td>Norway</td>
<td>Ireland</td>
</tr>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>TWA: 10 ppm</td>
<td>TWA: 10 ppm</td>
<td>TWA: 10 ppm</td>
<td>TWA: 10 ppm</td>
<td>TWA: 10 ppm</td>
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<tr>
<td>112-34-5</td>
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<td>TWA: 67 mg/m³</td>
<td>TWA: 67 mg/m³</td>
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<td>STEL: 15 ppm</td>
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<tr>
<td></td>
<td>STEL: 101.2 mg/m³</td>
<td>STEL: 101.2 mg/m³</td>
<td>STEL: 101.2 mg/m³</td>
<td>STEL: 101.2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Derived No Effect Level (DNEL)     No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls

Ventilation systems. Ensure adequate ventilation, especially in confined areas.
Personal protective equipment
Eye/face protection  Wear safety glasses with side shields (or goggles).
Skin and body protection  Suitable protective clothing.

Environmental exposure controls  No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
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<tr>
<td>Physical state</td>
<td>liquid</td>
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</tr>
<tr>
<td>Appearance</td>
<td>light yellow liquid</td>
<td>No information available</td>
</tr>
<tr>
<td>Color</td>
<td>light yellow</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>slight odor</td>
<td>No information available</td>
</tr>
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</table>

9.2. Other information

<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>Boiling point / boiling range</td>
<td>285 °C</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>140 °C</td>
<td>Cleveland Open Cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
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<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td>No information available</td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td></td>
<td>No information available</td>
</tr>
<tr>
<td>Lower flammability limit:</td>
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</tr>
<tr>
<td>Vapor pressure</td>
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<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
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<tr>
<td>Relative density</td>
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<td>No information available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility(ies)</td>
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</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

Density  No information available

Volatile  No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity
No data available.

10.2. Chemical stability
Stable under normal conditions.

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

10.3. Possibility of hazardous reactions
Possibility of Hazardous Reactions
None under normal processing.

10.4. Conditions to avoid
Strong oxidizing agents.

10.5. Incompatible materials
No information available.
10.6. Hazardous decomposition products

None under normal use conditions. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

### Section 11: TOXICOLOGICAL INFORMATION

#### 11.1. Information on toxicological effects

**Acute toxicity**

**Product Information**
Product does not present an acute toxicity hazard based on known or supplied information.

- **Inhalation**
  - No data available.
- **Eye contact**
  - No data available.
- **Skin contact**
  - No data available.
- **Ingestion**
  - No data available.

**Unknown acute toxicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD₅₀ (mg/kg)</th>
<th>Dermal LD₅₀ (mg/kg)</th>
<th>Inhalation LC₅₀ (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexaaxatricosane</td>
<td>1746 (Rat)</td>
<td>2000 (Rat)</td>
<td>200 (Rat) 1h</td>
</tr>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>5660 (Rat)</td>
<td>2700 (Rat)</td>
<td></td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
No information available.

**Serious eye damage/eye irritation**
No information available.

**Sensitization**
No information available.

**Germ cell mutagenicity**
No information available.

**Carcinogenicity**
No information available.

**Reproductive toxicity**
No information available.

### Section 12: ECOLOGICAL INFORMATION

#### 12.1. Toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl 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>

#### 12.2. Persistence and degradability

No information available.

#### 12.3. Bioaccumulative potential

No information available.

#### 12.4. Mobility in soil

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Page 5 / 8
Mobility in soil
No information available.

12.5. Results of PBT and vPvB assessment
No information available.

12.6. Other adverse effects
No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Waste from residues/unused products
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Improper disposal or reuse of this container may be dangerous and illegal.

Section 14: TRANSPORT INFORMATION

IMDG
14.1 UN/ID No. Not regulated
14.2 Proper shipping name Not regulated
14.3 Hazard Class Not regulated
14.4 Packing Group Not regulated
14.5 Marine pollutant Not applicable
14.6 Special Provisions None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

RID
14.1 UN/ID No. Not regulated
14.2 Proper shipping name Not regulated
14.3 Hazard Class Not regulated
14.4 Packing Group Not regulated
14.5 Environmental hazard Not applicable
14.6 Special Provisions None

ADR
14.1 UN/ID No. Not regulated
14.2 Proper shipping name Not regulated
14.3 Hazard Class Not regulated
14.4 Packing Group Not regulated
14.5 Environmental hazard Not applicable
14.6 Special Provisions None

IATA
14.1 UN/ID No. Not regulated
14.2 Proper shipping name Not regulated
14.3 Hazard Class Not regulated
14.4 Packing Group Not regulated
14.5 Environmental hazard Not applicable
14.6 Special Provisions None
Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>French RG number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>RG 84</td>
<td>-</td>
</tr>
</tbody>
</table>

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:
This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Restricted substance per REACH Annex XVII</th>
<th>Substance subject to authorization per REACH Annex XIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether - 112-34-5</td>
<td>Use restricted. See item 55.</td>
<td></td>
</tr>
</tbody>
</table>

Persistent Organic Pollutants
Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009  Not applicable

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

15.2. Chemical safety assessment
No information available

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
H319 - Causes serious eye irritation

Legend
SVHC: Substances of Very High Concern for Authorization:

Legend  Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value Skin designation

Issue Date 07-Jul-2017
Revision Date 13-Nov-2018
Revision Note

Not applicable.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

End of Safety Data Sheet