Safety Data Sheet

Section 1: Identification

Product identifier

Product Name
- PBO-8 Synergist

Synonyms
- 100208774; 100208775; 100208976; EPA Reg. No.: 89459-33; Prentox PBO-8

Product Description
- Water-white to amber liquid.

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

Recommended use
- Pesticide synergist.

Restrictions on use
- Avoid contact with eyes, skin or clothing. Avoid release to the environment. KEEP OUT OF THE REACH OF CHILDREN. Do not take internally.

Details of the supplier of the safety data sheet

Manufacturer
- Central Garden & Pet Company
  1501 E. Woodfield Road, Suite 200W
  Schaumburg, IL 60173
  United States
  www.central.com

Emergency telephone number

Manufacturer (Transportation)
- 1-800-424-9300 - CHEMTREC

Manufacturer (Transportation)
- 1-703-527-3887 - Chemtrec - Outside US collect calls accepted

Manufacturer
- 1-800-248-7763

Section 2: Hazard Identification

United States (US)
According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012
- Skin Sensitization 1
- Serious Eye Damage 1

Label elements

OSHA HCS 2012

DANGER

Hazard statements
- May cause an allergic skin reaction
Causes serious eye damage

Precautionary statements

Prevention
- Wash thoroughly after handling.
- Avoid breathing dust, fume, gas, mist, vapors and/or spray.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective gloves/protective clothing/eye protection/face protection.

Response
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a POISON CENTER or doctor/physician.
- IF ON SKIN: Wash with plenty of soap and water.
- If skin irritation or rash occurs: Get medical advice/attention.
- Wash contaminated clothing before reuse.

Storage/Disposal
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

OSHA HCS 2012
- This product is toxic to aquatic organisms including fish and invertebrates. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide</td>
<td>CAS:51-03-6</td>
<td>91.3%</td>
</tr>
<tr>
<td>Nonylphenol, ethoxylated proprietary mixture</td>
<td>Proprietary</td>
<td>8.7%</td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor for further treatment advice.

Skin
- IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Remove and isolate contaminated clothing.

Eye
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion
- IF SWALLOWED: call a poison center or doctor if you feel unwell. Rinse mouth. Have person drink pint of lukewarm water if able to swallow. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed
- May cause an allergic skin reaction in individuals with a sensitivity to Piperonyl
butoxide, may cause serious eye damage.

Indication of any immediate medical attention and special treatment needed

• Treat symptomatically and supportively.

### Section 5: Fire-Fighting Measures

#### Extinguishing media
- **Suitable Extinguishing Media**
  - Use water, foam, carbon dioxide, or dry chemical.

- **Unsuitable Extinguishing Media**
  - Avoid heavy hose streams.

#### Firefighting Procedures
- Keep unauthorized personnel away.
- LARGE FIRES: Dike fire control water for later disposal; do not scatter the material. Stay upwind. Ventilate closed spaces before entering.

#### Special hazards arising from the substance or mixture
- **Unusual Fire and Explosion Hazards**
  - None known.

- **Hazardous Combustion Products**
  - No data available.

#### Advice for firefighters
- Wear positive pressure self-contained breathing apparatus (SCBA).

### Section 6 - Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures
- **Personal Precautions**
  - Avoid contact with skin, eyes, and clothing. Remove clothing and wash thoroughly after use. Use appropriate Personal Protective Equipment (PPE). Do not walk through spilled material. Ensure adequate ventilation to remove vapors, fumes, dust etc.

- **Emergency Procedures**
  - Use normal clean up procedures.

#### Environmental precautions
- Contain and prevent from release into any waterway, sewer or drain.

#### Methods and material for containment and cleaning up
- **Containment/Clean-up Measures**
  - LARGE SPILLS: Dike far ahead of spill for later disposal.
  - SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

### Section 7 - Handling and Storage

#### Precautions for safe handling
- **Handling**
  - Wash hands thoroughly with soap and water after handling. Read label before use. Avoid contact with skin or eyes.

#### Conditions for safe storage, including any incompatibilities
- **Storage**
  - Keep only in the original container. Ventilate enclosed areas. Exposure to temperatures above 130°F may cause bursting. Keep container tightly closed. Keep out of reach of children. No open flames, no sparks and no smoking.

- **Incompatible Materials or Ignition Sources**
  - No data available.

#### Other Information
- See product label for additional information.
Section 8 - Exposure Controls/Personal Protection

Control parameters
Exposure Limits/Guidelines  • No data available.

Exposure controls
Engineering Measures/Controls  • Use adequate ventilation to remove vapors (fumes, dust etc)

Personal Protective Equipment
Pictograms  •

Respiratory  • In case of insufficient ventilation, use NIOSH approved respiratory protection.
Eye/Face  • Wear safety glasses.
Hands  • Impervious gloves. Some materials that are chemical resistant to this product are Barrier Laminate, Nitrile Rubber, Neoprene Rubber or Viton.
Skin/Body  • It is recommended for handlers to wear appropriate clothing to prevent skin contact including long sleeves, long pants, socks and shoes.

General Industrial Hygiene Considerations  • Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Environmental Exposure Controls  • Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Other Information  • See product label for specific use PPE instructions.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
<td>Liquid</td>
<td>Appearance/Description</td>
<td>Water white to amber liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>Water white to amber.</td>
<td>Odor</td>
<td>Pleasant licorice-like.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General Properties

| Boiling Point         | No data available | Melting Point | No data available |
| Decomposition Temperature | No data available | pH | 6 |
| Specific Gravity/Relative Density | 1.0494 g/ml | Bulk Density | No data available |
| Water Solubility      | Insoluble | Viscosity | No data available |

Volatility

| Vapor Pressure         | No data available | Vapor Density | No data available |
| Evaporation Rate       | No data available |    |    |

Flammability

| Flash Point            | > 200 F(> 93.3333 C) | UEL | No data available |
| LEL                   | No data available | Flame Duration | No data available |
| Flammability (solid, gas) | Not Flammable. |    |    |

Environmental

| Octanol/Water Partition coefficient | No data available |    |    |
Section 10: Stability and Reactivity

Reactivity
- No dangerous reaction known under conditions of normal use.

Chemical stability
- Stable

Possibility of hazardous reactions
- Hazardous polymerization will not occur.

Conditions to avoid
- Extreme temperatures. Keep away from fire.

Incompatible materials
- Strong oxidizing agents.

Hazardous decomposition products
- Thermal decomposition may produce toxic gases.

Section 11 - Toxicological Information

Information on toxicological effects

<table>
<thead>
<tr>
<th>Components</th>
<th>Acute Toxicity:</th>
<th>Irritation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide</td>
<td>51-03-6</td>
<td>Eye-Rabbit</td>
</tr>
<tr>
<td>(91.3%)</td>
<td>(91.3%)</td>
<td>Essentially non-irritating; Skin-Rabbit • Essentially non-irritating</td>
</tr>
</tbody>
</table>

GHS Properties

<table>
<thead>
<tr>
<th>GHS Properties</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>OSHA HCS 2012 • Skin Sensitizer 1</td>
</tr>
<tr>
<td>STOT-RE</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>STOT-SE</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Toxicity for Reproduction</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
<td>OSHA HCS 2012 • Serious Eye Damage 1</td>
</tr>
</tbody>
</table>

Route(s) of entry/exposure
- Inhalation, Ingestion, Eyes, and Skin

Potential Health Effects

Inhalation
- Under normal conditions of use, no health effects are expected.
Chronic (Delayed)  
- No data available.

Skin  
**Acute (Immediate)**  
- May cause an allergic reaction in individuals with a sensitivity to piperonyl butoxide.

**Chronic (Delayed)**  
- No data available.

Eye  
**Acute (Immediate)**  
- Nonylphenol, ethoxylated proprietary mixture causes serious eye damage.

**Chronic (Delayed)**  
- No data available.

**Ingestion**  
**Acute (Immediate)**  
- Under normal conditions of use, no health effects are expected.

**Chronic (Delayed)**  
- No data available.

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### Section 12 - Ecological Information

#### Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide (91.3%)</td>
<td>51-03-6</td>
<td><strong>Crustacea</strong>: Crustacea <em>Daphnia magna</em> 0.047 mg/L [Chronic LOEC]; 48 Hour(s) LC50 Crustacea <em>Daphnia magna</em> 0.51 mg/L [Acute]; 48 Hour(s) LC50 Crustacea <em>Mysis shrimp</em> 0.49 mg/L [Acute]; NOEC Crustacea <em>Daphnia magna</em> 0.03 mg/L [Chronic]; <strong>Fish</strong>: 96 Hour(s) LC50 Fish <em>Rainbow Trout</em> 1.9 mg/L [Acute]; 96 Hour(s) LC50 Fish <em>Sheephead minnow</em> 3.94 mg/L [Acute]; NOEC Fish <em>Fathead minnow</em> 0.04 mg/L [Chronic]; Fish <em>Fathead minnow</em> 0.11 mg/L [Chronic LOEC]</td>
</tr>
</tbody>
</table>

**Persistence and degradability**  
- No data available.

**Bioaccumulative potential**  
- No data available.

**Mobility in Soil**  
- No data available.

**Other adverse effects**  
- No studies have been found.

**Potential Environmental Effects**  
- This product is toxic to aquatic organisms including fish and invertebrates.

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### Section 13 - Disposal Considerations

#### Waste treatment methods

- **Product waste**: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

- **Packaging waste**: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

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### Section 14 - Transport Information

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class(es)</th>
<th>Packing group</th>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### DOT
| UN3082 | Environmentally hazardous substance, liquid, n.o.s (Piperonyl butoxide) | 9 | III | N/A |
### IMO/IMDG
| UN3082 | Environmentally hazardous substance, liquid, n.o.s (Piperonyl butoxide) | 9 | III | Marine Pollutant |
### IATA/ICAO
| UN3082 | Environmentally hazardous substance, liquid, n.o.s (Piperonyl butoxide) | 9 | III | Acute Aquatic Toxicity |

**Special precautions for user**
- None specified.
- Not relevant.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**Other information**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Data Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMO/IMDG</td>
<td>No data available</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Key to abbreviations**

\[ N/A = \text{Not applicable.} \]

### Section 15 - Regulatory Information

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

**SARA Hazard Classifications**

- Acute

#### FIFRA – Pesticide Labeling

This material is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

**CAUTION**

Keep out of reach of children.

**Precautionary Statements**

**Hazards to Humans and Domestic Animals**

- HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION Harmful if swallowed inhaled or absorbed through the skin. Avoid contact with skin eyes or clothing. Wear long-sleeved shirt and long pants socks and shoes and chemical resistant gloves (such as Barrier Laminate Butyl Rubber Nitrile Rubber Neoprene Rubber Polyvinyl Chloride or Viton (Selection Category C)).

**First Aid**

- If on skin or clothing: Take off contaminated clothing • Rinse skin immediately with plenty of water for 15-20 minutes • Call a poison control center or doctor for treatment advice If swallowed • Call a poison control center or doctor immediately for treatment advice • Have person sip a glass of water if able to swallow « Do not induce vomiting unless told to do so by a poison control center or doctor • Do not give anything by mouth to an unconscious or convulsing person If m eyes • Hold eye open and rinse slowly and gently with water for 15-20 minutes • Remove contact lenses if present after the first 5 minutes then continue rinsing eye • Call a poison control center or doctor for treatment advice If inhaled • Move person to fresh air • If person is not breathing call 911 or an ambulance then give artificial respiration preferably by mouth-to-mouth if possible « Call a poison control center or doctor for further treatment advice.

**Environmental Hazards**

- This product is toxic to aquatic organisms including fish and invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through runoff. This product has a potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Do not apply directly to water to areas where surface water is present or to intertidal areas below the mean high water mark Do not contaminate water when disposing of equipment
wash-waters or rinsate. Do not discharge effluent containing this product into lakes streams ponds estuaries oceans or other waters unless in accordance with the requirements of a National Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Do not use or store near heat or open flame.

### Section 16 - Other Information

<table>
<thead>
<tr>
<th>Last Revision Date</th>
<th>27/May/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation Date</td>
<td>27/May/2015</td>
</tr>
</tbody>
</table>

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- The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. **NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.**