**Safety Data Sheet (SDS)**

**Revision / Review Date:** 2/10/15

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### 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th><strong>Product Name:</strong></th>
<th>ODPA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distributed By:</strong></td>
<td>HB Chemical</td>
</tr>
<tr>
<td></td>
<td>1665 Enterprise Parkway</td>
</tr>
<tr>
<td></td>
<td>Twinsburg Oh 44087</td>
</tr>
<tr>
<td></td>
<td>Phone - 330-920-8023</td>
</tr>
<tr>
<td><strong>MSDS Prepared By (w Suppliers Input):</strong></td>
<td>HB Chemical</td>
</tr>
<tr>
<td><strong>Chemical Name / Family:</strong></td>
<td>4-octyl-N-phenylaniline/Octylateddiphenylamine</td>
</tr>
<tr>
<td><strong>CAS Number:</strong></td>
<td>4175-37-5</td>
</tr>
<tr>
<td><strong>EC Number:</strong></td>
<td>224-040-5</td>
</tr>
<tr>
<td><strong>Product Use:</strong></td>
<td>Used as rubber additives</td>
</tr>
<tr>
<td><strong>REACH:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>OSHA Status:</strong></td>
<td>Not Hazardous</td>
</tr>
</tbody>
</table>

For emergency health, safety, and environmental information, calls 330-920-8023
For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

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### 2. Hazard(s) Identification

**Classification of the substance:**

**Classification:**

The most important adverse physicochemical effects: Not applicable.

The most important adverse human health effects: Not applicable.

The most important adverse environmental effects: Not applicable.

**Label elements Hazard pictograms:**

No hazard pictogram is used.

**Signal words:**

No signal word is used

**Hazard Statement:**

Not applicable.

**Precautionary statement:**

Not applicable.

**Other Hazards:**

Not available (PBT, vPvB, substance is an endocrine disruptor etc.)
3. Composition / Information on Ingredients

Substance/Mixture: Substance

Ingredient(s):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Registration No.</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-octyl-N-phenylaniline</td>
<td>N/A</td>
<td>4175-37-5</td>
<td>224-040-5</td>
<td>90%</td>
</tr>
<tr>
<td>Others</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>10%</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Description of first aid measures: In all case of doubt, or when symptoms persist, seek medical attention.

Inhalation: Move to fresh air. Seek medical advice if necessary.

Eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open. Seek medical advice if irritation develops.

Skin: Remove contaminated clothing. Wash off with soap and water. Get medical aid if irritation persists.

Ingestion: Rinse mouth and then drink plenty of water. Get medical aid if necessary.

Most important symptoms and effects, both acute and delayed: The product is not classified as harmful to human health effect.

Indication of any immediate medical attention and special treatment needed: If skin irritation or rash occurs, get medical aid advice/attention.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Use carbon dioxide, foam, dry powder.

Unsuitable extinguishing media: Not available.

Special hazards arising from the substance or mixture: Combustion products: carbon monoxide, carbon dioxide, nitrogen oxides.

Advise for fire-fighter: Wear self-contained breathing apparatus and chemical protective clothing.
### 6. Accidental Release Measures

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

**For non-emergency personnel:** Use personal protective equipment. Avoid breathing mist and vapours. Ensure adequate ventilation. Evacuate personnel to safe areas. Handle in accordance with good industrial hygiene and safety practice.

**For emergency responders:** Wear an appropriate NIOSH/MSHA approved respirator if mist, vapor or dust is generated.

**Environmental precautions:** Do not allow material to be released to the environment without proper governmental permits.

**Methods for containment and cleaning up:** Vacuum or seep up material and place into a suitable disposal container. Clean up spills immediately, using the appropriate protective equipment. Avoid generating dusty conditions. Provide ventilation.

**Additional information:** Clear spills immediately.

### 7. Handling and Storage:

**Precautions for safe handling:**

**Protective measures:** Use personal protective equipment. Avoid contact with skin and eyes. Provide appropriate exhaust ventilation. Wash hands thoroughly after handling. Remove contaminated clothing.

**Advice on general occupational hygiene:** Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Keep away from incompatible materials.

**Specific end use(s):** Not applicable.

### 8. Exposure Controls / Personal Protection

**Control parameters:**

**Occupational exposure limits:** Not available.

**Additional exposure limits under the conditions of use:** Not available.

**DNEUDMEL and PNEC-Values:** Not available.

**Exposure controls**

**Appropriate engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.
Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear safety glasses.

Hand protection: Handle with gloves. Wear appropriate gloves.

Body protection: Wear appropriate protective clothing and boots.

Respiratory protection: Wear appropriate respirator if necessary.

Thermal hazards: Wear suitable protective clothing to prevent heat.

Environmental exposure controls: Avoid discharge into the environment. Dispose of according to local regulations, Federal and official regulations.

9. Physical and Chemical Properties

Appearance: Powder
Colour: Not available
Odour: Not available
Odour threshold: Not available
pH: Not available
Melting point/range: 27-87°C
Boiling point/range (°C): 409.3°C (760mmHg)
Flash point (°C): 208.3°C
Evaporation rate: Not available
Flammability (solid, gas): Not available
Ignition temperature (°C): Not available
Upper/lower flammability/explosive limits: Not available
Vapour pressure (25°C): 6.56E-07mm Hg
Vapour density: Not available
Relative Density (20°C): 0.979g/cm3
Bulk density (kg/m3): Not available
Water solubility (g/l) at 20°C: Insoluble
n-Octanol/Water (log Po/w): Not available
Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity, dynamic (mPa s): Not available
Explosive properties: Not available
Oxidising properties: Not available

Other information:

Fat solubility(solvent— oil to be specified) etc.: Not available
Surface tension: Not available
Dissociation constant in water(pKa): Not available
Oxidation-reduction Potential: Not available
Molecular Formula: C20H27N
Molecular Weight: 281.43

10. Stability and Reactivity
Reactivity: The substance is stable under normal storage and handling conditions.

Chemical Stability: stable at room temperature in closed containers under normal storage and handling conditions.

Possibility of hazardous reactions: No dangerous reactions known.

Incompatibility (Materials to Avoid): Strong oxidizing agents.

Conditions to Avoid: Incompatible materials.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, nitrogen oxides.

11. Toxicological Information

Toxicokinetics, metabolism and distribution
Non-human toxicological data: Not available.

Information on toxicological effects
Acute toxicity: LD50(Oraf Rat): Not available. LD50(Dermal, Rat): Not available. LC50(Inhalation, Rat): Not available.

Skin corrosion/Irritation: Serious eye damage/irritation: Not classified.

Respiratory or skin sensitization: Not classified.

Germ cell mutagenicity: Carcinogenicity: Not classified.

Reproductive toxicity: Not classified.

STOT- single exposure: Not classified.

STOT-repeated exposure: Not classified.

Aspiration hazard: Not classified.

12. Ecological Information

Toxicity:

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Time</th>
<th>Species</th>
<th>Method</th>
<th>Evaluation</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>N/A</td>
<td>96h</td>
<td>Fish</td>
<td>OECD 203</td>
<td>N/A</td>
</tr>
<tr>
<td>EC50</td>
<td>N/A</td>
<td>48h</td>
<td>Daphnia</td>
<td>OECD 202</td>
<td>N/A</td>
</tr>
<tr>
<td>EC50</td>
<td>N/A</td>
<td>72h</td>
<td>Algae</td>
<td>OECD 201</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Persistence and degradability: Not available.
Bio accumulative potential: Not available.
Mobility in soil: Not available.
Results of PBT & vPvB assessment: Not available.

Other adverse effects: Do not empty into drains.

13. Disposal Considerations
Waste treatment methods:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Product / Packaging disposal:

If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

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14. Transport Information

D.O.T. Shipping Name  
Not regulated.

Air - ICAO (international Civil Aviation Organization)  
Not regulated

Sea - IMDG (International Maritime Dangerous Goods)  
Not regulated

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15. Regulatory Information

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

Relevant information regarding authorization:  
Not applicable.

Relevant information regarding restriction:  
Not applicable.

Other EU regulations:  
Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations:  
Not applicable

Chemical Safety Assessment has been carried out?  
YES □  NO □ X □

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16. Other Information

The above information has been compiled from what we believe to be credible sources. To our knowledge the information is accurate and reliable, however, it is not guaranteed. Any recommendations issued by HB Chemical personnel or literature is derived from experience and by no means should be taken as fact or construed as a recommendation to violate of any law, regulation or patent. It is the users responsibility to determine the suitability of any HB supplied material in their application. The individual conditions of each customer are well outside of our control and we cannot be held liable for its functionality and use. Please contact our office should you need specific information beyond what is supplied above. As with all Chemical usage safety precautions beyond the stated are highly recommended.