## Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
<th>Personal Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>See Section 15.</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### Common Name/Trade Name
N,N-Diethyl-p-phenylenediamine Sulfate

### Manufacturer
SPECTRUM LABORATORY PRODUCTS INC.  
14422 S. SAN PEDRO STREET  
GARDENA, CA 90248

### Commercial Name(s)
Not available.

### Synonym
1,4-Benzenediamine, N,N-diethyl-, sulfate; N,N-Diethyl-1,4-phenylenediamine sulfate

### Chemical Name
p-Phenylenediamine, N,N-diethyl-, sulfate

### Chemical Family
Not available.

### Chemical Formula
C10-H16-N2.H2SO4

### Supplier
SPECTRUM LABORATORY PRODUCTS INC.  
14422 S. SAN PEDRO STREET  
GARDENA, CA 90248

### Catalog Number(s)
D3427

### CAS#
6283-63-2

### RTECS
SS9625000

### TSCA
TSCA 8(b) inventory: No products were found.

### CI#
Not available.

### IN CASE OF EMERGENCY
CHEMTREC (24hr) 800-424-9300
CALL (310) 516-8000

## Section 2. Composition and Information on Ingredients

### Exposure Limits

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) {N,N-}Diethyl-p-phenylenediamine Sulfate</td>
<td>6283-63-2</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

### Toxicological Data on Ingredients
- LD₅₀: Not available.
- LC₅₀: Not available.

### Section 3. Hazards Identification

#### Potential Acute Health Effects
Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

#### Potential Chronic Health Effects
- CARCINOGENIC EFFECTS: Not available.
- MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.
- TERATOGENIC EFFECTS: Not available.
- DEVELOPMENTAL TOXICITY: Not available.
Repeated or prolonged exposure is not known to aggravate medical condition.

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**Continued on Next Page**
### Section 4. First Aid Measures

| Eye Contact | Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs. |
| Skin Contact | Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used. |
| Serious Skin Contact | Not available. |
| Inhalation | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
| Serious Inhalation | Not available. |
| Ingestion | Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Serious Ingestion | Not available. |

### Section 5. Fire and Explosion Data

| Flammability of the Product | May be combustible at high temperature. |
| Auto-Ignition Temperature | Not available. |
| Flash Points | Not available. |
| Flammable Limits | Not available. |
| Products of Combustion | These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...), sulfur oxides (SO2, SO3...). |
| Explosion Hazards in Presence of Various Substances | Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks. |
| Fire Fighting Media and Instructions | SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. |
| Special Remarks on Fire Hazards | As with most organic solids, fire is possible at elevated temperatures |
| Special Remarks on Explosion Hazards | Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard. |

### Section 6. Accidental Release Measures

| Small Spill | Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. |
| Large Spill | Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. |
## Section 7. Handling and Storage

**Precautions**
Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

**Storage**
Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 8°C (46.4°F). Refrigerate. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

## Section 8. Exposure Controls/Personal Protection

**Engineering Controls**
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection**
Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill**
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits**
Not available.

## Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state and appearance</strong></td>
<td>Solid.</td>
</tr>
<tr>
<td><strong>Molecular Weight</strong></td>
<td>262.32 g/mole</td>
</tr>
<tr>
<td><strong>pH (1% soln/water)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>185°C (365°F) - 189°C</td>
</tr>
<tr>
<td><strong>Critical Temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Volutility</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Water/Oil Dist. Coeff.</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Ionicity (in Water)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Dispersion Properties</strong></td>
<td>See solubility in water.</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Soluble in cold water.</td>
</tr>
</tbody>
</table>

## Section 10. Stability and Reactivity Data

**Stability**
The product is stable.

**Instability Temperature**
Not available.

**Conditions of Instability**
Excess heat, dust generation, incompatible materials

**Incompatibility with various substances**
Reactive with oxidizing agents, acids.

**Corrosivity**
Not available.

*Continued on Next Page*
### Section 11. Toxicological Information

**Routes of Entry**
- Inhalation, Ingestion.

**Toxicity to Animals**
- LD50: Not available.
- LC50: Not available.

**Chronic Effects on Humans**
- **MUTAGENIC EFFECTS:** Mutagenic for bacteria and/or yeast.

**Other Toxic Effects on Humans**
- Hazardous in case of ingestion.
- Slightly hazardous in case of skin contact (irritant), of inhalation.

**Special Remarks on Toxicity to Animals**
- Not available.

**Special Remarks on Chronic Effects on Humans**
- May affect genetic material (mutagenic).
- May cause adverse reproductive effects based on animal test data.

**Special Remarks on other Toxic Effects on Humans**
- Acute Potential Health Effects:
  - Skin: May cause skin irritation.
  - Eyes: Causes eye irritation.
  - Inhalation: May cause respiratory tract irritation.
  - Ingestion: Harmful if swallowed. May affect behavior/central nervous system (tremor, convulsions, rigidity, excitement, ataxia, muscle contraction or spasticity), Blood (methemoglobinemia due to a deficiency of oxygen in the blood).
  - Chronic Potential Health Effects:
    - Ingestion: Prolonged or repeated ingestion may affect the blood (changes in white blood cell count, pigmented or nucleated red blood cells), liver (hepatitis), urinary system/kidneys (acute renal failure, acute tubular necrosis).

### Section 12. Ecological Information

**Ecotoxicity**
- Not available.

**BOD5 and COD**
- Not available.

**Products of Biodegradation**
- Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation**
- The products of degradation are less toxic than the product itself.

**Special Remarks on the Products of Biodegradation**
- Not available.

### Section 13. Disposal Considerations

**Waste Disposal**
- Waste must be disposed of in accordance with federal, state and local environmental control regulations.

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*Continued on Next Page*
### Section 14. Transport Information

**DOT Classification**

Not a DOT controlled material (United States).

**Identification**

Not applicable.

**Special Provisions for Transport**

Not applicable.

**DOT (Pictograms)**

![No DOT Pictogram](image)

### Section 15. Other Regulatory Information and Pictograms

**Federal and State Regulations**

No products were found.

**California Proposition 65 Warnings**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

**Other Regulations**

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications**

- **WHMIS (Canada)**: Not controlled under WHMIS (Canada).
- **DSCL (EEC)**: R22- Harmful if swallowed. S36- Wear suitable protective clothing.

**HMIS (U.S.A.)**

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Fire Hazard</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>E</td>
</tr>
</tbody>
</table>

**National Fire Protection Association (U.S.A.)**

- Health: 2
- Flammability: 1
- Reactivity: 0
- Specific hazard: 0

**WHMIS (Canada) (Pictograms)**

![WHMIS Pictogram](image)

**DSCL (Europe) (Pictograms)**

![DSCL Pictogram](image)

**TDG (Canada) (Pictograms)**

![TDG Pictogram](image)

**ADR (Europe) (Pictograms)**

![ADR Pictogram](image)

**Protective Equipment**

- Continued on Next Page
All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.