Section I. Chemical Product and Company Identification

Chemical Name: N,N-Dimethyl-1,4-phenylenediamine Sulfate

Catalog Number: D0782

Synonym: 4-Aminodimethylaniline Sulfate

Chemical Formula: C₈H₁₂N₂·H₂SO₄

CAS Number: 536-47-0

Supplier: TCI America
9211 N. Harborgate St.
Portland OR
1-800-423-8616

In case of Emergency Call
Chemtrec®
(800) 424-9300 (U.S.)
(703) 527-3887 (International)

Section II. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Percent (%)</th>
<th>TLV/PEL</th>
<th>Toxicology Data</th>
</tr>
</thead>
</table>
| N,N-Dimethyl-1,4-phenylenediamine Sulfate | 536-47-0 | Min. 98.0% (Tit.) | Not available. | Rat LD₅₀ (oral) 100 mg/kg
| | | | | Rat LDL₅₀ (oral) 75 mg/kg
| | | | | Mouse LD₅₀ (oral) 59 mg/kg |

Section III. Hazards Identification

Acute Health Effects
- Toxic if ingested or inhaled. Avoid all contact with this material. Overexposure may result in serious illness or death.
- Irritating to eyes and skin on contact. Inhalation causes irritation of the lungs and respiratory system. Inflammation of the skin is characterized by coughing, scaling, reddening, or occasionally blistering.
- Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

Chronic Health Effects
- CARCINOGENIC EFFECTS: Not available.
- MUTAGENIC EFFECTS: Not available.
- TERATOGENIC EFFECTS: Not available.
- DEVELOPMENTAL TOXICITY: Not available.
- Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section IV. 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. Get medical attention.

Skin Contact
- In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Inhalation
- If the victim is not breathing, perform mouth-to-mouth resuscitation. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, oxygen can be administered. Seek medical attention if respiratory problems do not improve.

Ingestion
- INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Examine the lips and mouth to ascertain whether the toxic material was ingested; the absence of such signs, however, is not conclusive.

Section V. Fire and Explosion Data

Flammability
- May be combustible at high temperature.
- Not available.

Flash Points
- Not available.
- Flammable Limits: Not available.

Combustion Products
- These products are toxic carbon oxides (CO, CO₂), sulfur oxides (SO₂...), nitrogen oxides (NO...).

Fire Hazards
- Not available.

Explosion Hazards
- Risks of explosion of the product in presence of mechanical impact: Not available.
- Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions
- SMALL FIRE: Use DRY chemical powder.
- LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.
- Consult with local fire authorities before attempting large scale fire-fighting operations.

Emergency phone number: (800) 424-9300
Section VI. Accidental Release Measures

Spill Cleanup Instructions
- Stop leak if without risk. DO NOT get water inside container. DO NOT touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all sources of ignition. Consult federal, state, and/or local authorities for assistance on disposal.

Section VII. Handling and Storage

Handling and Storage Information
- TOXIC. IRRITANT. LIGHT SENSITIVE. REFRIGERATE. Keep locked up. Keep away from heat. Mechanical exhaust required. When not in use, tightly seal the container and store in a dry, cool place. Avoid excessive heat and light. DO NOT ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Treat symptomatically and supportively.

Section VIII. Exposure Controls/Personal Protection

Exposure Limits
- Not available.

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
- Splash goggles. Lab coat. Dust respirator. Boots. Gloves. A MSHA/NIOSH approved respirator must be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Section IX. Physical and Chemical Properties

Physical state @ 20°C
- Solid. (White Crystalline Powder.)

Specific Gravity
- Not available.

Molecular Weight
- 234.27

Boiling Point
- 495°C (923°F)

Melting Point
- 200 to 205°C (392 to 401°F) (Dec)

Refractive Index
- Not available.

Critical Temperature
- Not available.

Viscosity
- Not available.

Solubility
- Soluble in water.

Partition Coefficient
- Not available.

Vapor Pressure
- Not applicable.

Vapor Density
- Not available.

Odor
- Not available.

Taste
- Not available.

Section X. Stability and Reactivity Data

Stability
- This material is stable if stored under proper conditions. (See Section VII for instructions)

Conditions of Instability
- Avoid excessive heat and light.

Incompatibilities
- Reactive with strong oxidizing agents, acids, acid chlorides, acid anhydrides, chloroformates.

Section XI. Toxicological Information

RTECS Number
- ST1575000

Routes of Exposure
- Eye Contact. Ingestion. Inhalation.

Toxicity Data
- Rat LD₅₀ (oral) 100 mg/kg
- Rat LD₅₀ (oral) 75 mg/kg
- Mouse LD₅₀ (oral) 59 mg/kg

Chronic Toxic Effects
- CARCINOGENIC EFFECTS: Not available.
- MUTAGENIC EFFECTS: Not available.
- TERATOGENIC EFFECTS: Not available.
- DEVELOPMENTAL TOXICITY: Not available.

Acute Toxic Effects
- Toxic if ingested or inhaled. Avoid prolonged contact with this material. Overexposure may result in serious illness or death.
- Irritating to eyes and skin on contact. Inhalation causes irritation of the lungs and respiratory system. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
- Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

Continued on Next Page

Emergency phone number (800) 424-9300

### Section XII. Ecological Information

**Ecotoxicity**  
Not available.

**Environmental Fate**  
Not available.

### Section XIII. Disposal Considerations

**Waste Disposal**  
Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

### Section XIV. Transport Information

**DOT Classification**  
DOT Class 6.1: Toxic material.

**PIN Number**  
UN2811

**Proper Shipping Name**  
Toxic solid, organic, n.o.s.

**Packing Group (PG)**  
III

**DOT Pictograms**

![DOT Pictogram]

### Section XV. Other Regulatory Information and Pictograms

**TSCA Chemical Inventory (EPA)**  
This compound is ON the EPA Toxic Substances Control Act (TSCA) inventory list.

**WHMIS Classification (Canada)**  
CLASS D-1E: Material causing immediate and serious toxic effects (TOXIC).  
On DSL.

**EINECS Number (EEC)**  
208-636-2

**EEC Risk Statements**  
R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.  
R36/37/38 - Irritating to eyes, respiratory system and skin.

**Japanese Regulatory Data**  
ENCS No. (3)-243

### Section XVI. Other Information

**Version 1.0**


**Notice to Reader**

TCI laboratory chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our MSDS sheets are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated MSDS sheets for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.