



From: Mallinckrodt Baker, Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 908-859-2151  
CHEMTREC: 1-800-424-9300  
National Response in Canada  
CANUTEC: 613-996-6666  
Outside U.S. And Canada  
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

# N,N-Dimethyl-p-phenylenediamine Sulfate

## 1. Product Identification

Synonyms: None  
CAS No.: 60160-75-0  
Molecular Weight: 370.47  
Chemical Formula:  $[(CH_3)_2NC_6H_4NH_2]_2.H_2SO_4$   
Product Codes: K065

## 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
N,N-Dimethyl-p-phenylenediamine S	60160-75-0	99 - 100%	Yes

## 3. Hazards Identification

### Emergency Overview

**WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC REACTION. POWDERED MATERIAL MAY FORM EXPLOSIVE DUST-AIR MIXTURES. CAUSES EYE AND SKIN IRRITATION.**

### Potential Health Effects

Inhalation:

Is harmful

**Ingestion:**

Is harmful

**Skin Contact:**

Irritation, allergic reaction may develop.

**Eye Contact:**

Irritation.

**Chronic Exposure:**

No information found.

**Aggravation of Pre-existing Conditions:**

Damaged skin.

---

## 4. First Aid Measures

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Prompt action is essential.

**Ingestion:**

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. 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 re-use.

**Eye Contact:**

In case of eye contact, immediately flush with plenty of water for at least 15 minutes.

---

## 5. Fire Fighting Measures

**Fire:**

Not expected to be a fire hazard.

**Explosion:**

Fire or excessive heat may produce hazardous decomposition products. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

**Fire Extinguishing Media:**

Water spray; Dry chemical; Carbon dioxide.

**Special Information:**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

---

## 6. Accidental Release Measures

Sweep up material and package for safe feed to an incinerator.

---

## 7. Handling and Storage

Keep from contact with oxidizing materials. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

---

## 8. Exposure Controls/Personal Protection

### **Airborne Exposure Limits:**

None established.

### **Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

### **Personal Respirators (NIOSH Approved):**

For conditions of use where exposure to the substance is apparent and engineering controls are not feasible, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

### **Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

### **Eye Protection:**

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

### **Other Control Measures:**

There is insufficient data in the published literature to assign complete numerical SAF-T-DATA\* ratings and laboratory protective equipment for this product. Special precautions must be used in storage, use and handling. Protective equipment for laboratory bench use should be chosen using professional judgment based on the size and type of reaction or test to be conducted and the available ventilation, with overriding consideration to minimize contact with the chemical.

---

## 9. Physical and Chemical Properties

### **Appearance:**

Gray Powder.

### **Odor:**

No information found.

### **Solubility:**

Appreciable (> 10%)

### **Specific Gravity:**

No information found.

### **pH:**

No information found.

### **% Volatiles by volume @ 21C (70F):**

0

### **Boiling Point:**

No information found.

### **Melting Point:**

No information found.

### **Vapor Density (Air=1):**

No information found.

### **Vapor Pressure (mm Hg):**

0 @ 20C (68F)

### **Evaporation Rate (BuAc=1):**

0

---

# 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

Carbon dioxide, carbon monoxide, oxides of sulfur, oxides of nitrogen.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Strong oxidizing agents.

**Conditions to Avoid:**

No information found.

---

# 11. Toxicological Information

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
N,N-Dimethyl-p-phenylenediamine S (60160-75-0)	No	No	None

---

# 12. Ecological Information

**Environmental Fate:**

No information found.

**Environmental Toxicity:**

No information found.

---

# 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

---

# 14. Transport Information

Not regulated.

---

# 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia

---

N,N-Dimethyl-p-phenylenediamine S (60160-75-0) Yes Yes No Yes

-----\Chemical Inventory Status - Part 2\-----

Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil.
N,N-Dimethyl-p-phenylenediamine S (60160-75-0)	No	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----

Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
N,N-Dimethyl-p-phenylenediamine S (60160-75-0)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----

Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8(d)
N,N-Dimethyl-p-phenylenediamine S (60160-75-0)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No  
Reactivity: No (Pure / Solid)

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

---

## 16. Other Information

**Label Hazard Warning:**

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC REACTION. POWDERED MATERIAL MAY FORM EXPLOSIVE DUST-AIR MIXTURES. CAUSES EYE AND SKIN IRRITATION.

**Label Precautions:**

No SAF-T-DATA Ratings have been developed for this product. Read and follow all warnings, precautions, instructions and other safety and handling information on the label and MSDS.

Minimize dust generation and accumulation. Use with adequate ventilation and avoid breathing dust. Keep container closed and wash thoroughly after handling.

Avoid contact with eyes, skin, clothing.

**Label First Aid:**

If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Prompt action is essential. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 8.

**Disclaimer:**

\*\*\*\*\*

**Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.**

\*\*\*\*\*

**Prepared by:** Environmental Health & Safety  
Phone Number: (314) 654-1600 (U.S.A.)