

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 2,5-Diaminotoluene sulfate  
**Synonyms:** 2-methyl-1,4- benzenediamine sulfate  
**Company Identification:** PI Chemicals Ltd.  
Room 512, Building 1  
88 Cailun Road, Zhangjiang Hi-Tech park,  
Pudong New Area, Shanghai 201203, China  
**Telephone Number:** 86-21-58953700  
**Fax Number:** 86-21-58953701

### Section 2 - Product Information

**Catalog Number:** PI-19993  
**CAS Number:** 95-70-5  
**EG/EC Number:** 202-442-1  
**Purity:** 98%

### Section 3 - Physical and Chemical Properties

**Physical state:** White to off-white  
**Color:** Solid  
**Odor:** Not available  
**Molecular Formula:**  $C_7H_{10}N_2 \cdot H_2SO_4$   
**Molecular Weight:** 220.17  
**Freezing/Melting Point:** 61°C  
**Boiling Point:** 273°C  
**Flash Point:** Not available  
**Autoignition Temperature:** Not available  
**Refractive Index (nD20):** Not available  
**Density:** Not available  
**Decomposition Temperature:** Not available  
**Solubility:** Soluble in water, alcohol, ether, hot benzene.

### Section 4 - Hazards Identification

**Eye:** Causes eye irritation.  
**Skin:** Causes skin irritation. Harmful if absorbed through the skin.  
**Ingestion:** May be harmful if swallowed.

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

### **Section 5 - First Aid Measures**

**Eye:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Flush skin with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops and persists.

**Ingestion:** Get medical aid immediately. Wash mouth out with water.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

### **Section 6 - Stability and Reactivity**

**Chemical Stability:** Stable

**Materials to avoid:** Strong oxidizing agents, naked flame, hyperpyrexia.

**Conditions to avoid:** Incompatible materials.

**Hazardous Decomposition Products:** Carbon monoxide, and carbon dioxide, Nitrogen oxides.

### **Section 7 - Handling and Storage**

**Handling:** Avoid all direct contact with material. Wash thoroughly after handling. Have safety shower and eye wash available. Do not get in eyes, on skin, on clothing.

**Storage:** Store in cool place, Keep container tightly closed in a dry and well-ventilated place. Avoid sources of ignition.

### **Section 8 - Personal Protection**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### **Section 9 - Fire and Explosion Hazard Data**

**General Information:** As in any fire, wear a self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and protective clothing to prevent contact with skin and eyes.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

## **Section 10 - Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container.

## **Section 11 - Toxicological Information**

**RTECS#:** CAS# 95-70-5: Not available.

**LD50/LC50:** CAS# 95-70-5: Draize test, rabbit, eye: 100mg (24h) severe; Oral, mouse: LD<sub>50</sub> = 102mg/kg; <BR.

**Carcinogenicity:** CAS# 95-70-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Other:** The toxicological properties have not been fully investigated.

## **Section 12 - Environmental information**

Not available.

## **Section 13 - Disposal Consideration**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

## **Section 14 - Transport Information**

**ADR/RID:** UN# 2811 6.1/PG 3

**IMDG:** UN# 2811 6.1/PG 3

**IATA:** UN# 2811 6.1/PG 3

## **Section 15 - Regulatory Information**

### **European/International Regulations**

European Labeling in Accordance with EC Directives

**Hazard Symbols:** T, N

**Indication of Danger:** Not available

**Risk Statements:**

R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

R25/43/51- May cause sensitization by skin contact; Toxic if swallowed.

R51/53- Toxic to aquatic organisms, May cause long-term adverse effects in the aquatic environment.

**Safety Statements:**

S24-Avoid contact with skin.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S45-In case of accident or if you feel unwell, seek medical advice immediately (show label

where possible)

S61- Avoid release to the environment. Refer to special instructions safety data sheet.

## ***Section 16 - Additional Information***

***MSDS Creation Date:***                      **Jue 15, 2009**

***Update:***                                        **Jue 16, 2009**

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