

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Pyrimidine-5-boronic acid  
**Synonyms:** 5-Pyrimidinylboronic acid  
**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-25045  
**CAS Number:** 109299-78-7  
**MDL Number:** Not available  
**Purity:** 98%

### Section 3 - Physical and Chemical Properties

**Physical state:** Powder  
**Color:** White  
**Odor:** Not available  
**Molecular Formula:**  $C_4H_5BN_2O_2$   
**Molecular Weight:** 123.91  
**Freezing/Melting Point:** 110-114 °C  
**Boiling Point:** Not available  
**Flash Point:** Not available  
**Autoignition Temperature:** Not available  
**Refractive Index (nD20):** Not available  
**Density:** Not available  
**Decomposition Temperature:** Not available  
**Solubility:** Not available

### 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 under normal temperatures and pressures.

**Materials to avoid:** Strong oxidizing agents, alcohols.

**Conditions to avoid:** Incompatible materials.

**Hazardous Decomposition Products:** Carbon monoxide, oxides of nitrogen, carbon dioxide, borane, boron oxides.

**Polymerization:** Will not occur.

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

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

### **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# 109299-78-7: None listed.

**LD50/LC50:** RTECS#: None listed.

**Carcinogenicity:** Pyrimidine-5-boronic acid - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

**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:** Not a dangerous good.

**IMDG:** Not a dangerous good.

**IATA:** Not a dangerous good.

## **Section 15 - Regulatory Information**

### **European/International Regulations**

European Labeling in Accordance with EC Directives

**Hazard Symbols:** Xi, Xn

**Indication of Danger:** Irritant

**Risk Phrases:**

R 22 Harmful if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety Phrases:**

S 22 Do not breathe dust.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves

**WGK (Water Danger/Protection)**

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CAS#109299-78-7: 3

**Canada**

CAS#109299-78-7: Not available

**US Federal**

**TSCA**

CAS# 109299-78-7 is not listed on the TSCA Inventory. It is for research and development use only.

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

**MSDS Creation Date:** April 10, 2009

**Update:** Original

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