

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Biphenyl-2-ylboronic acid  
**Synonyms:** 2-Phenylbenzeneboronic acid; Biphenylboronic acid  
**Company Identification:** PI Chemicals Ltd.  
5rd Floor, 88 Cailun Road  
Zhangjiang Hi-Tech Park  
Pudong New Area, Shanghai China, 201203  
**Telephone Number:** 86-21-58953700  
**Fax Number:** 86-21-58953701

### Section 2 - Product Information

**Catalog Number:** PI-25591  
**CAS Number:** 4688-76-0  
**MDL Number:** MFCD00136929  
**EC Number:** Not available  
**Purity:** 98%

### Section 3 - Physical and Chemical Properties

**Physical state:** Powder  
**Color:** White  
**Odor:** Not available  
**Molecular Formula:**  $C_{12}H_{11}BO_2$   
**Molecular Weight:** 198.03  
**Freezing/Melting Point:** 167 - 172 °C (333 - 342 °F)  
**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:** Soluble in water

### Section 4 - Hazards Identification

**Eye:** Causes eye irritation.

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<b>Skin:</b>	Causes skin irritation. Harmful if absorbed through the skin.
<b>Ingestion:</b>	May cause irritation of the digestive tract. Toxic if swallowed.
<b>Inhalation:</b>	May be harmful if inhaled. Causes respiratory tract irritation.

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

<b>If inhaled:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
<b>In case of skin contact:</b>	Wash off with soap and plenty of water.
<b>In case of eye contact:</b>	Flush eyes with water as a precaution.
<b>If swallowed:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

<b>Chemical Stability:</b>	Stable under recommended storage conditions.
<b>Materials to avoid:</b>	Strong oxidizing agents.
<b>Conditions to Avoid:</b>	no data available.
<b>Hazardous Decomposition Products:</b>	Carbon oxides, Borane/boron oxides.
<b>Hazardous Polymerization:</b>	Has not been reported.

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

<b>Handling:</b>	Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
<b>Storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

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

<b>Eyes:</b>	Wear appropriate protective eyeglasses.
<b>Skin:</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Respirators:</b>	Use an approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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

<b>General Information:</b>	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.
<b>Extinguishing Media:</b>	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# 4688-76-0: Not available.

**LD50/LC50:** RTECS: Not available.

**Carcinogenicity:** Biphenyl-2-ylbionic acid  
–Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

### **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**

**IATA:** This substance is considered to be non-hazardous for transport.

**IMO:** This substance is considered to be non-hazardous for transport.

**RID/ADR:** This substance is considered to be non-hazardous for transport.

### **Section 15 - Regulatory Information**

#### **European/International Regulations**

European Labeling in Accordance with EC Directives

Hazard Symbols: C, Xi, Xn

Indication of Danger: Corrosive, Irritant, Harmful

Risk Phrases:

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

R 20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

Safety Phrases:

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

S 36: Wear suitable protective clothing.

WGK (Water Danger/Protection)

CAS# 4688-76-0: Not available.

Canada

CAS# 4688-76-0: Not available.

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**US Federal****TSCA**

CAS# 4688-76-0 is not listed on the TSCA Inventory. It is for research and development use only.

**Section 16 - Additional Information**

**MSDS Creation Date:** March 16, 2008

**Update:** November 29, 2010

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