

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Tris(trimethylsilyl)phosphine  
**Synonyms:**  
**Company Identification:** PI Chemicals Ltd.  
Building B, 633 E Shan Road, Pudong New Area  
Shanghai 200127, China  
**Telephone Number:** 86-21-58953700  
**Fax Number:** 86-21-58953701

### Section 2 - Product Information

**Catalog Number:** PI-35224  
**CAS Number:** 15573-38-3  
**MDL Number:** MFCD00015487  
**EC Number:** Not available  
**Purity:** 98%

### Section 3 - Physical and Chemical Properties

**Physical state:** Liquid  
**Color:** Colorless  
**Molecular Formula:** C<sub>9</sub>H<sub>27</sub>PSi<sub>3</sub>  
**Molecular Weight:** 250.54  
**Freezing/Melting Point:** Undetermined  
**Boiling Point:** 243 - 244 °C (469 - 471 °F) - lit.  
**Flash Point:** Undetermined  
**Autoignition Temperature:** Undetermined  
**Refractive Index (n<sub>D</sub>20):** Undetermined  
**Density:** 0.863 g/cm<sup>3</sup> at 25 °C (77 °F)  
**Decomposition Temperature:** Undetermined  
**Solubility:** Undetermined

### Section 4 - Hazards Identification

**Eye:** Causes eye irritation.  
**Skin:** Causes skin irritation. Harmful if absorbed through the skin.  
**Ingestion:** May cause irritation of the digestive tract. Toxic if swallowed.

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

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

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact:** Wash off with soap and plenty of water.

**In case of eye contact:** Flush eyes with water as a precaution.

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

**Chemical Stability:** Stable under recommended temperatures and pressures.

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

**Conditions to Avoid:** Avoid moisture. Exposure to air.

**Hazardous Decomposition Products:** Carbon oxides, Oxides of phosphorus, silicon oxides.

**Hazardous Polymerization:** Has not been reported.

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

**Handling:** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.  
Keep away from sources of ignition - No smoking.

**Storage:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Recommended storage temperature: 2 - 8 °C  
Handle and store under inert gas. Air and moisture sensitive.

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

**Eyes:** Wear appropriate protective eyeglasses.

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

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

**Respirators:** Use an 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# 15573-38-3: Not available.

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

**Carcinogenicity:** Tris(trimethylsilyl)phosphine  
–Not listed as a carcinogen by ACGIH, IARC, NTP, or OSHA.

### ***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:** UN-Number: 2845 Class: 4.2 Packing group: I.

**IMO:** UN-Number: 2845 Class: 4.2 Packing group: I.

**RID/ADR:** UN-Number: 2845 Class: 4.2 Packing group: I.

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

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

European Labeling in Accordance with EC Directives

Hazard Symbols: F, Xi

Indication of Danger: Highly Flammable, Irritant

Risk Phrases:

R 17: Spontaneously flammable in air.

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

Safety Phrases:

S 16: Keep away from sources of ignition - No smoking.

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

S 27: Take off immediately all contaminated clothing.

S 28: After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer).

S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

**WGK (Water Danger/Protection)**

CAS#15573-38-3: 3.

**Canada**

CAS# 15573-38-3: Not available.

**US Federal**

**TSCA**

CAS# 15573-38-3 is not listed on the TSCA Inventory. It is for research and development use only.

***Section 16 - Additional Information***

**MSDS Creation Date:** 27 January, 2009

**Update:** 29 August, 2011

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