

## Material Safety Data Sheet

### **Section 1 - Chemical Product and Company Identification**

**MSDS Name:** 3,4-Pyridinedicarboxylic acid dimethyl ester  
**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-35949  
**CAS Number:** 1796-83-4  
**MDL Number:** Not available  
**EC Number:** Not available  
**Purity:** 98%

### **Section 3 - Physical and Chemical Properties**

**Physical state:** Liquid  
**Color:** Light red to brown  
**Odor:** Not determined  
**Molecular Formula:** C<sub>9</sub>H<sub>9</sub>NO<sub>4</sub>  
**Molecular Weight:** 195.17  
**Freezing/Melting Point:** Not determined  
**Boiling Point:** Not determined  
**Flash Point:** Not determined  
**Autoignition Temperature:** Not determined  
**Refractive Index (n<sub>D</sub>20):** Not determined  
**Density:** Not determined  
**Decomposition Temperature:** Not determined  
**Solubility:** Not determined

### **Section 4 - Hazards Identification**

**Eye:** Causes serious 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**

**Eye:** Flush eyes with plenty of water for several minutes. Get medical aid.

**Skin:** Flush skin with plenty of water and soap for several and rinse thoroughly.  
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 required, give artificial respiration. Get medical aid if symptoms persist.

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

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

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

**Conditions to Avoid:** No data available.

**Hazardous Decomposition Products:** Carbon oxides, nitrogen oxides.

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

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

**Handling:** Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Storage:** Store in cool, dry conditions in well sealed container. Keep container tightly sealed.

### **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 Fighting Measures**

**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:** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **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# 1796-83-4: Not available.

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

**Carcinogenicity:** 3,4-Pyridinedicarboxylic acid dimethyl ester - Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA or EPA..

### ***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:** Not dangerous goods.

**IMO:** Not dangerous goods.

**RID/ADR:** Not dangerous goods.

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

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

European Labeling in Accordance with EC Directives

Hazard Symbols: Xi

Indication of Danger: Irritant

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Risk Phrases:

R21/22: Harmful in contact with skin and if swallowed.

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

Safety Phrases:

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

S 36/37: Wear suitable protective clothing and gloves.

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

***MSDS Creation Date:*** Dec 1, 2009

***Update:*** Feb 22, 2012

*The above information is believed to be accurate and represents the best knowledge available to us currently. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall PI Chemicals, be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, even if PI Chemicals has been advised of the possibility of such damages.*