

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 4-Trifluoromethylthiobenzaldehyde  
**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-10104  
**CAS Number:** 4021-50-5  
**MDL Number:** MFCD00129191  
**EC Number:** Not available  
**Purity:** 98%

### Section 3 - Physical and Chemical Properties

**Physical state:** Solid  
**Color:** White crystalline  
**Molecular Formula:** C<sub>8</sub>H<sub>5</sub>F<sub>3</sub>OS  
**Molecular Weight:** 206.18  
**Freezing/Melting Point:** 29.0 - 31.0 °C  
**Boiling Point:** 219 °C 760 mmHg  
**Flash Point:** 212 °F 100 °C Method: closed cup  
**Autoignition Temperature:** Not available  
**Refractive Index :** 1.511  
**Density:** Not available  
**Decomposition Temperature:** Not available  
**Solubility:** Soluble in water

### Section 4 - Hazards Identification

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin:** May be harmful if absorbed through skin. Causes skin irritation.  
**Eyes:** Causes eye irritation.

**Ingestion:** May be harmful if swallowed.

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

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.  
Move out of dangerous area.

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

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

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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

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

**Chemical Stability:** Stable under recommended storage conditions.

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

**Conditions to Avoid:** Incompatible materials.

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

**Hazardous Polymerization:** Will not occur.

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

**Handling:** User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing.  
Avoid prolonged or repeated exposure.

**Storage:** Suitable: Keep tightly closed. Store in a cool dry place. Store under nitrogen.  
Store under inert gas.

### **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# 4021-50-5: Not available.  
**LD50/LC50:** RTECS: Not available.  
**Carcinogenicity:** 4-Trifluoromethylthiobenzaldehyde  
–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:** 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**

### **EU ADDITIONAL CLASSIFICATION**

**Symbol of Danger:** Xi

**Indication of Danger:** Irritant.

**R:** 36/37/38

**Risk Statements:** Irritating to eyes, respiratory system and skin.

**S:** 26-36

**Safety Statements:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

### **US CLASSIFICATION AND LABEL TEXT**

**Indication of Danger:** Irritant.

**Risk Statements:** Irritating to eyes, respiratory system and skin.

**Safety Statements:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

**UNITED STATES REGULATORY INFORMATION**

**SARA LISTED: No**

**CANADA REGULATORY INFORMATION**

**WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.**

**DSL: No**

**NDSL: No**

***Section 16 - Additional Information***

**MSDS Creation Date: June 20, 2008**

**Update: December 29, 2010**

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