

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

MSDS Name: 4-Cyanobenzaldehyde

Synonyms:

Company Identification: Shanghai PI Chemicals Ltd.
Room 6-306, Building 2
1341 Pudong South Road
Pudong New Area, Shanghai 200212, China

Telephone Number: 86-21-51389368

Fax Number: 86-21-51389367

Emergency Number: 86-21-51389369

Section 2 – Product Information

Catalog Number: PI-31014

CAS #: 105-07-7

Purity: 98.0%

EINECS# 203-267-3

Section 3 – Physical and Chemical Properties

Appearance: White-slightly beige crystalline powder

Odor: Not available

Molecular Formula: C₈H₅NO

Molecular Weight: 131.13

Freezing/Melting Point: 98-103°C

Boiling Point: 133°C (12mmHg)

Flash Point: Not available

Refractive Index: Not available

Density: Not available

Decomposition Temperature: Not available

Solubility: Insoluble in water

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: 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:** Air sensitive. Light sensitive.
- Materials to avoid:** Strong oxidizing agents, strong reducing agents, strong acids, strong bases.
- Conditions to Avoid:** Incompatible materials, light, exposure to air.
- Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen.
- Hazardous Polymerization:** Has not been reported.

Section 7 – Handling and Storage

- Handling:** Avoid breathing dust, vapor, mist, or gas. Keep container tightly closed. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Wash thoroughly after handling. Mechanical exhaust required.
- Storage:** Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container. Store under an inert atmosphere.

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# 105-07-7: CU5250000

LD50/LC50: RTECS: Not available

Carcinogenicity: 4-Cyanobenzaldehyde - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Section 12 – Environmental information

Do not empty into drains.

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	IMO	RID/ARD	
Shipping Name:	TOXIC SOLID, ORGANIC, N.O.S.*	TOXIC SOLID, ORGANIC, N.O.S.	TOXIC SOLID, ORGANIC, N.O.S.
Hazard Class:	6.1	6.1	6.1
UN Number:	3439	3439	3439
Packing Group:	III	III	III

Section 15 – Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 20/21/22 Harmful by inhalation, in contact with skin and 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 and eye/face protection.

WGK (Water Danger/Protection)

CAS# 105-07-7: Not available

Canada

CAS# 105-07-7 is listed on Canada's NDSL List

US Federal**TSCA**

CAS# 105-07-7 is listed on the TSCA Inventory. It is for research and development use only.

Section 16 – Additional Information

MSDS Creation Date: 2/19/2007

Update: Original

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.