

Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

MSDS Name: 1H-Benzotriazole-1-acetonitrile
Synonyms:
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-17156
CAS Number: 111198-08-4
MDL Number: MFCD00082568
EC Number: Not available
Purity: 97%

Section 3 - Physical and Chemical Properties

Physical state: Solid
Color: Brown
Molecular Formula: C₈H₆N₄
Molecular Weight: 158.16
Freezing/Melting Point: 84 - 89 °C (183 - 192 °F) - lit.
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

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 oxides, nitrogen oxides (NO_x), Hydrogen cyanide (hydrocyanic acid).

Hazardous Polymerization: Has not been reported.

Section 7 - Handling and Storage

Handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage: Keep container tightly closed in a dry and well-ventilated place.
Keep in a dry place.

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# 111198-08-4: Not available.

LD50/LC50: RTECS: Not available.

Carcinogenicity: 1H-Benzotriazole-1-acetonitrile
–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: 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: Xn

Indication of Danger: Harmful

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

S 36: Wear suitable protective clothing.

WGK Germany:

CAS# 111198-08-4: 3.

Canada

CAS# 111198-08-4: Not available.

US Federal

TSCA

CAS# 111198-08-4 is not listed on the TSCA Inventory. It is for research and development use only.

Section 16 - Additional Information

MSDS Creation Date: November 6, 2008

Update: January 7, 2011

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.