

Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

MSDS Name: N-t-Butylpiperazine
Synonyms:
Company Identification: PI Chemicals Ltd.
Room 512, Building 1
88 Cailun Road, Zhangjiang Hi-Tech park,
Pudong New Area, Shanghai 201203, China
Telephone Number: 86-21-58953700
Fax Number: 86-21-58953701

Section 2 - Product Information

Catalog Number: PI-10319
CAS Number: 38216-72-7
MDL Number: Not available
Purity: 98%

Section 3 - Physical and Chemical Properties

Appearance: Crystalline
Color: White
Odor: Not available
Molecular Formula: C₈H₁₈N₂
Molecular Weight: 142.24
Freezing/Melting Point: 36~38°C
Boiling Point: Not available
Flash Point: Not available
Autoignition Temperature: Not available
Refractive Index (nD20): Not available
Density: Not available
Decomposition Temperature: Not available

Section 4 - Hazards Identification

Eye: Causes eye irritation.
Skin: Causes skin irritation. Harmful if absorbed through the skin.
Ingestion: May be harmful 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 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:** The product is stable.
- Materials to avoid:** Incompatible materials.
- Conditions to avoid:** Sensitive to light.
- Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, nitrogen oxides.
- Hazardous Polymerization:** Not available.

Section 7 - Handling and Storage

- Handling:** Avoid contact with skin and eyes. Wash thoroughly after handling. Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment.
- Storage:** Store in a cool, dry well -ventilated place. Keep container tightly closed when not in use. Protect from light.

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

Not available.

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

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Indication of Danger: Not available

Risk Statements:

R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

R36/37/38- Irritating to eyes, respiratory system and skin.

Safety Statements:

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Section 16 - Additional Information

MSDS Creation Date: March 15, 2007

Update: May 6, 2008

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