

# **Material Safety Data Sheet**

# Section 1 - Chemical Product and Company Identification

| MSDS Name:              | (R)-1-N-Boc-2-methylpiperazine          |  |
|-------------------------|---|--|
| 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-18252    |
|-----------------|-------------|
| CAS Number:     | 170033-47-3 |
| Purity:         | 98.0%       |

# Section 3 - Physical and Chemical Properties

| Physical state:            | Solid                |
|----------------------------|----------------------|
| Color:                     | White                |
| Odor:                      | Not available        |
| Molecular Formula:         | $C_{10}H_{20}N_2O_2$ |
| Molecular Weight:          | 200.28               |
| Freezing/Melting Point:    | Not available        |
| 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:                | Not available        |

## 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:* 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:               | Stable under normal temperatures and pressures.   |
|-----------------------------------|---|
| Materials to avoid:               | Strong oxidizing agents.                          |
| Conditions to Avoid:              | Incompatible materials.                           |
| Hazardous Decomposition Products: | Carbon monoxide, carbon dioxide, nitrogen oxides. |
| 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. Wash thoroughly after handling. Mechanical exhaust required. *Storage:* Store in a cool, dry well ventilated place away from sources of heat and incompatible

substances. Keep container tightly closed when not in use. Store at 2-8 deg C

#### 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.                           |
| <b>Respirators:</b> | 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#170033-47-3: Not availableLD50/LC50:RTECS: Not available.Carcinogenicity:(R)-1-N-Boc-2-methylpiperazine - Not listed as a carcinogen by ACGIH, IARC, NTP, or<br/>CA Prop 65.

#### 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:    | No data available |
|----------|-------------------|
| IMO:     | No data available |
| RID/ADR: | No data available |

#### Section 15 - Regulatory Information

European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols: Xi Indication of Danger: Irritant Risk Phrases: R 22: Harmful if swallowed. Safety Phrases: S 24/25: Avoid contact with skin and eyes. S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. WGK (Water Danger/Protection) CAS#170033-47-3: 3 Canada CAS#170033-47-3: Not available

**US Federal** 



#### TSCA

CAS# 170033-47-3 is not listed on the TSCA Inventory. It is for research and development use only.

#### Section 16 - Additional Information

| MSDS Creation Date: | March 25, 2006    |
|---------------------|-------------------|
| Update:             | February 20, 2008 |

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