

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.
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#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
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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