

Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

MSDS Name:	Boc-D-cyclohexylglycine	
Synonyms:	Boc-D-α-cyclohexylglycine	
Company Identification:	PI Chemicals Ltd.	
	Building B, 633 E Shan Road, Pudong New Area	
	Shanghai 200127, China	
Telephone Number:	86-21-58953700	
Fax Number:	86-21-58953701	

Section 2 - Product Information

Catalog Number:	PI-18840
CAS Number:	70491-05-3
MDL Number:	MFCD00133629
EC Number:	Undetermined
Purity:	98.0%

Section 3 - Physical and Chemical Properties

Physical state:	Crystalline powder
Color:	White
Odor:	Undetermined
Molecular Formula:	$C_{13}H_{23}NO_4$
Molecular Weight:	257.33
Freezing/Melting Point:	Undetermined
Boiling Point:	Undetermined
Flash Point:	Undetermined
Autoignition Temperature:	Undetermined
Refractive Index (nD20):	Undetermined
Density:	Undetermined
Decomposition Temperature:	Undetermined
Solubility:	Undetermined

Section 4 - Hazards Identification

Signal word:	Warning
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. Cause 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 recommended storage conditions.
Materials to avoid:	Strong oxidizing agents
Conditions to Avoid:	Has not been reported.
Hazardous Decomposition Products:	Carbon oxides, nitrogen oxides (NOx)
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. Keep away from sources of ignition No smoking.
- *Storage:* Keep container tightly closed in a dry and well-ventilated place.

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, alcohol-resistant foam, dry chemical or carbon dioxide.

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# 70491-05-3: Not available
LD50/LC50:	Not available
Carcinogenicity:	Boc-D-cyclohexylglycine - 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:	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 Signal word: Warning Hazard statement(s) H302 Harmful if swallowed. Risk Phrases: R 22: Harmful if swallowed. Safety Phrases: S 36/37: Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection)



CAS# 70491-05-3: 3

Canada

CAS# 70491-05-3: Not available US Federal

TSCA

CAS# 70491-05-3: Not available

Section 16 - Additional Information

MSDS Creation Date:	Mar 15, 2008
Update:	July 25, 2012

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