

Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

<i>MSDS Name:</i>	4-Phenyl-2-butylamine
<i>Synonyms:</i>	Not available.
<i>Company Identification:</i>	PI Chemicals Ltd. Building B, 633 E Shan Road, Pudong New Area Shanghai 200127, China
<i>Telephone Number:</i>	86-21-58953700
<i>Fax Number:</i>	86-21-58953701

Section 2 - Product Information

<i>Catalog Number:</i>	PI-33450
<i>CAS Number:</i>	22374-89-6
<i>MDL Number:</i>	MFCD00008090
<i>EC Number:</i>	244-942-2
<i>Purity:</i>	98.0%

Section 3 - Physical and Chemical Properties

<i>Physical state:</i>	Liquid
<i>Color:</i>	Colorless clear
<i>Molecular Formula:</i>	C ₁₀ H ₁₅ N
<i>Molecular Weight:</i>	149.23
<i>Freezing/Melting Point:</i>	Undetermined
<i>Boiling Point:</i>	228-232 °C
<i>Flash Point:</i>	98 °C
<i>Autoignition Temperature:</i>	Undetermined
<i>Refractive Index (n_D20):</i>	Undetermined
<i>Density:</i>	0.922 g/mL at 25 °C(lit.)
<i>Decomposition Temperature:</i>	Undetermined
<i>Solubility:</i>	Undetermined

Section 4 - Hazards Identification

<i>Eye:</i>	Causes eye irritation.
<i>Skin:</i>	Causes skin irritation. Harmful if absorbed through the skin.
<i>Ingestion:</i>	May cause irritation of the digestive tract. Toxic if swallowed.
<i>Inhalation:</i>	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 normal temperatures and pressures.
- Materials to avoid:* Strong acids.
- Conditions to Avoid:* Has not been reported.
- Hazardous Decomposition Products:* Carbon oxides, Nitrogen oxides (NO_x).
- 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:* Store in a cool, dry place. Store in a tightly closed container. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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# 22374-89-6: UI3920000

LD50/LC50: LD50 Parenteral - mouse - 100 mg/kg

Carcinogenicity: 4-Phenyl-2-butylamine - 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	IMO	RID/ADR
<i>Shipping Name:</i>	Amines, liquid, corrosive, n.o.s. (4-Phenyl-2-butylamine)	Amines, liquid, corrosive, n.o.s. (4-Phenyl-2-butylamine)	Amines, liquid, corrosive, n.o.s. (4-Phenyl-2-butylamine)
<i>Hazard Class:</i>	8	8	8
<i>UN Number:</i>	2735	2735	2735
<i>Packing Group:</i>	III	III	III

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Signal word: Danger

Hazard statement(s)

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

Risk Phrases:

R 22: Harmful if swallowed.

Safety Phrases:

S 36/37: Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection)

CAS# 22374-89-6: 3

Canada

CAS# 22374-89-6: Not available

US Federal

TSCA

CAS# 22374-89-6: is listed on the TSCA Inventory. It is for research and development use only.

Section 16 - Additional Information

MSDS Creation Date: Mar 15, 2006

Update: August 31, 2012

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