

# **Material Safety Data Sheet**

## Section 1 - Chemical Product and Company Identification

Bis(adamantan-1-yl)(butyl)phosphine
PI Chemicals Ltd.
5rd Floor, 88 Cailun Road
Zhangjiang Hi-Tech Park
Pudong New Area, Shanghai China, 201203
86-21-58953700
86-21-58953701

## Section 2 - Product Information

Catalog Number:	PI-35029
CAS Number:	321921-71-5
MDL Number:	MFCD05861606
EC Number:	Not available
Purity:	97%

## Section 3 - Physical and Chemical Properties

Physical state:	Solid
Color:	Not available
Odor:	Not available
Molecular Formula:	C <sub>24</sub> H <sub>39</sub> P
Molecular Weight:	358.54
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.



LTD.	
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. 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 temperatures and pressures.
Materials to avoid:	Strong oxidizing agents.
Conditions to Avoid:	Incompatible materials.
Hazardous Decomposition Products:	Carbon oxides, Oxides of phosphorus.
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.

   Stars are
   Stars in a cool, dry place. Stars in a tightly closed container.
- *Storage:* Store in a cool, dry place. Store in a tightly closed container.

### Section 8 - Personal Protection

Eyes:	Wear appropriate protective eyeglasses.
Skin:	Wear appropriate protective gloves to prevent skin exposure.
Clothing:	Wear appropriate protective clothing to prevent skin exposure.
Respirators:	Use an 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 (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

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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# 321921-71-5: Not available.LD50/LC50:Not available.Carcinogenicity:Bis(adamantan-1-yl)(butyl)phosphine - Not listed as a carcinogen by ACGIH, IARC,<br/>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:	This substance is considered to be non-hazardous for transport.
IMO:	This substance is considered to be non-hazardous for transport.
RID/ADR:	This substance is considered to be non-hazardous for transport.

#### Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives Hazard Symbols: Xn Indication of Danger: Harmful Risk Phrases: R22: Harmful if swallowed. Safety Phrases: S36: Wear suitable protective clothing and gloves.

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WGK (Water Danger/Protection)
CAS#321921-71-5: 3
Canada
CAS#321921-71-5: Not available
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US Federal



CAS#321921-71-5 is not listed on the TSCA Inventory. It is for research and development use only.

#### Section 16 - Additional Information

MSDS Creation Date:	May 12, 2008
Update:	May 12, 2008

The above information is believed to be accurate and represents the best knowledge available to us currently. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall PI Chemicals, be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, even if PI Chemicals has been advised of the possibility of such damages.