

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

<i>MSDS Name:</i>	2,5-Bis-(5-tert-butyl-2-benzoxazol-2-yl)thiophene
<i>Synonyms:</i>	BBOT
<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-12266
<i>CAS Number:</i>	7128-64-5
<i>MDL Number:</i>	MFCD00005774
<i>EC Number:</i>	230-426-4
<i>Purity:</i>	98%

### Section 3 - Physical and Chemical Properties

<i>Physical state:</i>	Powder
<i>Color:</i>	Pale yellow
<i>Molecular Formula:</i>	C <sub>26</sub> H <sub>26</sub> N <sub>2</sub> O <sub>2</sub> S
<i>Molecular Weight:</i>	430.56
<i>Freezing/Melting Point:</i>	199 - 201 ° C (390 - 394 ° F) - lit.
<i>Boiling Point:</i>	Undetermined
<i>Flash Point:</i>	Undetermined
<i>Autoignition Temperature:</i>	Undetermined
<i>Refractive Index (n<sub>D</sub>20):</i>	Undetermined
<i>Density:</i>	Undetermined
<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:* Keep container tightly closed in a dry and well-ventilated place.
- Materials to avoid:* Strong oxidizing agents.
- Conditions to Avoid:* Has not been reported.
- Hazardous Decomposition Products:* Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Sulphur 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. 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# 7128-64-5: DM4888332

*LD50/LC50:* LD50 Oral - rat - > 10,000 mg/kg

*Carcinogenicity:* 2,5-Bis-(5-tert-butyl-2-benzoxazol-2-yl)thiophene - Not listed as a carcinogen by ACGIH, IARC, NTP, or OSHA.

### ***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

Hazard Symbols: Xi

Indication of Danger: Irritant

Risk Phrases:

R 36/37/38: Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36: Wear suitable protective clothing.

WGK (Water Danger/Protection)

CAS# 7128-64-5: 1

Canada

CAS# 7128-64-5: Not available

*US Federal*

*TSCA*

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CAS# 7128-64-5: is listed on the TSCA Inventory. It is for research and development use only.

### ***Section 16 - Additional Information***

*MSDS Creation Date:* Mar 15, 2008

*Update:* Mar 23, 2012

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