

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

|                                |   |
|--------------------------------|---|
| <b>MSDS Name:</b>              | Barbaloin   |
| <b>Synonyms:</b>               | 1,8-Dihydroxy-10-(β-D-glucopyranosyl)-3-(hydroxymethyl)-9(10H)-Anthracenone; Aloin A        |
| <b>Company Identification:</b> | PI Chemicals Ltd.<br>Building B, 633 E Shan Road, Pudong New Area<br>Shanghai 200127, China |
| <b>Telephone Number:</b>       | 86-21-58953700  |
| <b>Fax Number:</b>             | 86-21-58953701  |

### Section 2 - Product Information

|                        |              |
|------------------------|--------------|
| <b>Catalog Number:</b> | PI-30138     |
| <b>CAS Number:</b>     | 1415-73-2    |
| <b>MDL Number:</b>     | MFCD00151160 |
| <b>EC Number:</b>      | 215-808-0    |
| <b>Purity:</b>         | 98%          |

### Section 3 - Physical and Chemical Properties

|  |  |
|--|--|
| <b>Physical state:</b>                     | Solid  |
| <b>Molecular Formula:</b>                  | C <sub>21</sub> H <sub>22</sub> O <sub>9</sub> |
| <b>Molecular Weight:</b>                   | 418.39   |
| <b>Freezing/Melting Point:</b>             | Undetermined                                   |
| <b>Boiling Point:</b>                      | Undetermined                                   |
| <b>Flash Point:</b>                        | Undetermined                                   |
| <b>Autoignition Temperature:</b>           | Undetermined                                   |
| <b>Refractive Index (n<sub>D</sub>20):</b> | Undetermined                                   |
| <b>Density:</b>                            | Undetermined                                   |
| <b>Decomposition Temperature:</b>          | Undetermined                                   |
| <b>Solubility:</b>                         | Undetermined                                   |

### Section 4 - Hazards Identification

|             |                        |
|-------------|------------------------|
| <b>Eye:</b> | Causes eye irritation. |
|-------------|------------------------|

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|                    |  |
|--------------------|--|
| <b>Skin:</b>       | Causes skin irritation. Harmful if absorbed through the skin.    |
| <b>Ingestion:</b>  | May cause irritation of the digestive tract. Toxic if swallowed. |
| <b>Inhalation:</b> | May be harmful if inhaled. Causes respiratory tract irritation.  |

### **Section 5 - First Aid Measures**

|                    |  |
|--------------------|--|
| <b>Eye:</b>        | Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.  |
| <b>Skin:</b>       | 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. |
| <b>Ingestion:</b>  | Get medical aid immediately. Wash mouth out with water.  |
| <b>Inhalation:</b> | 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**

|  |  |
|--|--|
| <b>Chemical Stability:</b>               | Stable under recommended temperatures and pressures. |
| <b>Materials to avoid:</b>               | Strong oxidizing agents.                             |
| <b>Hazardous Decomposition Products:</b> | Carbon oxides.                                       |
| <b>Hazardous Polymerization:</b>         | Has not been reported.                               |

### **Section 7 - Handling and Storage**

|                  |  |
|------------------|--|
| <b>Handling:</b> | Avoid breathing dust, vapor, mist, or gas. Keep container tightly closed. Avoid contact with skin and eyes. Wash thoroughly after handling. Mechanical exhaust required. |
| <b>Storage:</b>  | Keep container tightly closed in a dry and well-ventilated place.<br>Recommended storage temperature: 2-8°C. Air and light sensitive. Store under inert gas.             |

### **Section 8 - Personal Protection**

|                     |  |
|---------------------|--|
| <b>Eyes:</b>        | Wear appropriate protective eyeglasses.  |
| <b>Skin:</b>        | Wear appropriate protective gloves to prevent skin exposure.   |
| <b>Clothing:</b>    | Wear appropriate protective clothing to prevent skin exposure.   |
| <b>Respirators:</b> | Use an approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |

### **Section 9 - Fire Fighting Measures**

|                             |   |
|-----------------------------|---|
| <b>General Information:</b> | 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. |
| <b>Extinguishing Media:</b> | 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# 1415-73-2: LZ6520000.  
**LD50/LC50:** RTECS: LZ6520000.  
**Carcinogenicity:** Barbaloin –Not listed as a carcinogen by ACGIH, IARC, NTP, or OSHA.

## **Section 12 - Environmental information**

No data 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#1415-73-2: 3

### **US Federal**

TSCA

CAS# 1415-73-2 is not listed on the TSCA Inventory. It is for research and development use only.

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

***MSDS Creation Date:*** 17 September, 2009

***Update:*** 12 August, 2011

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