

Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

<i>MSDS Name:</i>	Zoledronic acid hydrate
<i>Synonyms:</i>	1-Hydroxy-2-(1H-imidazol-1-yl)ethylidene]bisphosphonic acid Monohydrate
<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-28079
<i>CAS Number:</i>	165800-06-6
<i>MDL Number:</i>	Not available
<i>EC Number:</i>	Not available
<i>Purity:</i>	98%

Section 3 - Physical and Chemical Properties

<i>Physical state:</i>	Powder
<i>Color:</i>	White to off-white
<i>Odor:</i>	Not determined
<i>Molecular Formula:</i>	C ₅ H ₁₀ N ₂ O ₇ P ₂ *H ₂ O
<i>Molecular Weight:</i>	290.106
<i>Freezing/Melting Point:</i>	239 deg C (decompose)
<i>Boiling Point:</i>	Not determined
<i>Flash Point:</i>	Not determined
<i>Autoignition Temperature:</i>	Not determined
<i>Refractive Index (n_D20):</i>	Not determined
<i>Density:</i>	Not determined
<i>Decomposition Temperature:</i>	Not determined
<i>Solubility:</i>	Soluble in 0.1N NaOH. Sparingly soluble in water.

Section 4 - Hazards Identification

<i>Eye:</i>	Causes serious eye irritation.
<i>Skin:</i>	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. Causes respiratory tract irritation.

Section 5 - First Aid Measures

Eye: Flush eyes with plenty of water for several minutes. Get medical aid.

Skin: Flush skin with plenty of water and soap for several and rinse thoroughly.
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 required, give artificial respiration. 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, light.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides, phosphorus oxide.

Hazardous Polymerization: Will not occur.

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.

Storage: Store in a cool, dry place. Store in a tightly closed container. Keep away from light, heat, sources of ignition and incompatibles such as oxidizing agents.

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 Fighting Measures

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, water foam, polymer foam, carbon dioxide, dry chemicals.

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# 165800-06-6: Not available.

LD50/LC50: RTECS: Not available.

Carcinogenicity: Zoledronic acid hydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA or EPA..

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

Hazard Symbols: Xi

Indication of Danger: Irritant

Risk Phrases:

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

Safety Phrases:

S22 - Do not breathe dust.

S24/25 - Avoid contact with skin and eyes.

US Federal

TSCA

CAS# 165800-06-6 is not listed on the TSCA Inventory. It is for research and development use only.

Section 16 - Additional Information

MSDS Creation Date: May 28, 2007
Update: Dec 9, 2011

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.