

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

MSDS Name: Alendronate sodium
Synonyms: 4-Amino-1-hydroxy-1-phosphonobutylphosphonic acid monosodium
Company Identification: PI Chemicals Ltd.
Room 6-306, Building 2
1341 Pudong South Road
Pudong New Area, Shanghai 200212, China
Telephone Number: 86-21-51389368
Fax Number: 86-21-51389367
Emergency Number: 86-21-51389369

Section 2 – Product Information

Catalog Number: PI-10773
CAS #: 121268-17-5
MDL #: MFCD01748233
EC#: None
Purity: 98.0%

Section 3 – Physical and Chemical Properties

Physical state: Crystalline powder
Color: White
Odor: Not available
Molecular Formula: $C_4H_{12}NNaO_7P_2$
Molecular Weight: 271.08
Freezing/Melting Point: 245 deg C
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.
- Skin:** 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 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 oxidizing agents.
- Conditions to Avoid:** Incompatible materials.
- Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, nitrogen oxides, phosphorous oxides.
- 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. Store at 4 deg C.

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, 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#121268-17-5: SZ6523500

LD50/LC50: RTECS: CAS#121268-17-5:
LD50
Oral
Rat
552 mg/kg;
LD50
Oral
Mouse
966 mg/kg;
TDLo - Lowest published toxic dose
Oral
Human - woman
700 ug/kg/7D-I;
LDLo - Lowest published lethal dose
Intravenous
Rodent - rat
30 mg/kg;
LDLo - Lowest published lethal dose
Intravenous
Mammal - dog
10 mg/kg;
TDLo - Lowest published toxic dose
Intravenous
Rodent - rat
9100 ug/kg/13W-I;
TDLo - Lowest published toxic dose
Oral

Rodent - rat
510 mg/kg;
TDLo - Lowest published toxic dose
Intravenous
Rodent - rat
42 mg/kg;
TDLo - Lowest published toxic dose
Intravenous
Rodent - rat
27500 ug/kg;
TDLo - Lowest published toxic dose
Intravenous
Rodent - rat
26 mg/kg;
TDLo - Lowest published toxic dose
Intravenous
Rodent - rabbit
650 ug/kg.

Carcinogenicity: Alendronate sodium - 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: 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: Xi

Indication of Danger: Irritant

Risk Phrases:

R 22: Harmful if swallowed.

Safety Phrases:

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

WGK (Water Danger/Protection)

CAS#121268-17-5: 3

Canada

CAS#121268-17-5: Not available

US Federal

TSCA

CAS# 121268-17-5 is not listed on the TSCA Inventory. It is for research and development use only.

Section 16 – Additional Information

MSDS Creation Date: March 15, 2006

Update: November 1, 2007

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