Section 1. Product and Company Identification

Product Name: Ibandronate Sodium Monohydrate
Product ID: IO502
Chemical Name (Synonyms): Ibandronic acid sodium salt
Supplier: LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com

Emergency Phone #: 1-800-424-9300

Section 2. Hazards Identification

GHS Classification: Skin irritation (Category 2) H315
Eye irritation (Category 2A) H319
Specific target organ toxicity - single exposure (Category 3) Respiratory system, H335

GHS Label elements including precautionary statements

Pictogram
Signal word: Warning

Hazard and precautionary statements
Hazard statements
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.

Precautionary statements
P261 - Avoid breathing dust, fumes, gas, mist, vapors, spray.
P264 - Wash skin thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves, eye protection, face protection.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 - If skin irritation occurs: Get medical advice/ attention.
P337 + P313 - If eye irritation persists: Get medical advice/ attention.
P362 - Take off contaminated clothing and wash before reuse.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification
Health hazard: 2
Chronic health hazard: *
Flammability: 0
Physical hazard: 0

NFPA Rating
Health hazard: 2
Fire hazard: 0
Reactivity hazard: 0

Potential Health Effects
Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.
Skin - May be harmful if absorbed through skin. Causes skin irritation.
Eyes - Causes serious eye irritation.
Ingestion - May be harmful if swallowed.
Specific target organ toxicity - single exposure - May cause respiratory irritation.

Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>C_{9}H_{23}NO_{7}P_{2} \cdot H_{2}O \cdot Na</td>
<td>359.21</td>
</tr>
<tr>
<td>CAS No.</td>
<td>138926-19-9</td>
<td>EC No.</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Eye Contact**
Flush eyes with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact**
Wash off with soap and plenty of water. Consult a physician.

**Inhalation**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Ingestion**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5. Firefighting Measures

**Flash Point**
Not available.

**Extinguishing Media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Firefighting Procedures**
Wear self-contained breathing apparatus for firefighting if necessary.

**Unusual Fire Hazards**
Not available.

Section 6. Accidental Release Measures

**Personal Precautions**
Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental Precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleanup**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

**Handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

**Storage Conditions**
Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: Ambient

**Hazardous Decomposition Products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), oxides of phosphorus, sodium oxides.

**Other Remarks**
Storage class (TRGS 510): 8B: Noncombustible, corrosive hazardous materials.
Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**
- **EXPOSURE CONTROLS**: Contains no substances with occupational exposure limit values.
- **Hazardous components without workplace control parameters**.
- **Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.**

**PERSONAL PROTECTION**
- **Eye/face protection**: Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
- **Skin protection**: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- **Body protection**: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- **Respiratory protection**: For nuisance exposures, use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection, use type OVAG/P99 (US) of type ABEK-P2 (EU EN 1243) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

**Physical State**
- Solid.

**Color**
- White crystal powder.

**Boiling Point**
- 84°C (dec.)

**Melting Point**
- Not available.

**Solubility**
- Soluble in water.

**Flash Point**
- Not available.

**Lower explosion limit**
- Not available.

**Upper explosion limit**
- Not available.

**Water solubility**
- Soluble in water.

**Partition coefficient: n-octanol/water**
- Not available.

**Relative vapor density**
- Not available.

**Vapor pressure**
- Not available.

**Relative vapor density**
- Not available.

**Ignition temperature**
- Not available.

**Autoignition temperature**
- Not available.

**Evaporation rate**
- Not available.

Section 10. Stability and Reactivity

**Stability**
- Stable under recommended storage conditions.

**Materials To Avoid**
- Strong oxidizing agents.

**Hazardous Decomposition Products**
- Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), oxides of phosphorus, sodium oxides.
Section 11. Toxicological Information

**Oral LD50** Not available.

**Inhalation LC50** Not available.

**Dermal LD50** Not available.

**Other information on acute toxicity** Not available.

**Skin corrosion/irritation** Irritating to skin. Information given is based on data obtained from similar substances.

**Serious eye damage/irritation** Eye irritation information given is based on data obtained from similar substances.

**Respiratory or skin sensitization** Not available.

**Germ cell mutagenicity** Not available.

**Carcinogenicity**
- **IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
- **NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive Toxicity** Not available.

**Teratogenicity** Not available.

**Specific organ toxicity single exposure (GHS)** Inhalation - May cause respiratory irritation. Information given is based on data obtained from similar substances.

**Specific organ toxicity repeated exposure (GHS)** Not available.

**Aspiration Hazard** Not available.

**Synergistic effects** Not available.

**Additional Information** RTECS: Not available. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

**Signs and symptoms of exposure** Not available.

**Potential Health Effects** Inhalation - May be harmful if inhaled. May cause respiratory tract irritation. Skin - May be harmful if absorbed through skin. Causes skin irritation. Eyes - Causes serious eye irritation. Ingestion - May be harmful if swallowed. Specific target organ toxicity - single exposure - May cause respiratory irritation.

Section 12. Ecological Information

**Toxicity** Not available.

**Mobility in soil** Not available.

**PBT and vPvB assessment** PBT/vPvB assessment not available as chemical safety assessment not required/not
Section 13. Disposal Considerations

**Waste Disposal**
- Dispose of material according to all federal, state and local regulations.
- Offer material to a licensed, professional waste disposal company to dispose of as unused product.

**Section 14. Transport Information**

**DOT (US)**
- UN number: 1759
- Class: 8
- Packing group: III
- Proper shipping name: Corrosive solids, n.o.s. (Ibandronate Sodium Monohydrate)
- Reportable Quantity (RQ): 
- Poison Inhalation Hazard: No

**IATA**
- UN number: 1759
- Class: 8
- Packing group: III
- Proper shipping name: Corrosive solids, n.o.s. (Ibandronate Sodium Monohydrate)

**IMDG**
- UN number: 1759
- Class: 8
- Packing group: III
- EMS CODE: F-A, S-B
- Proper shipping name: CORROSIVE SOLID, N.O.S. (Ibandronate Sodium Monohydrate)

**Further Information**

Section 15. Regulatory Information

**SARA 302 Components**
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Components**
Acute health hazard.

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**
- Ibandronate Sodium Monohydrate
- CAS #: 138926-19-9
- Revision Date:

**New Jersey Right To Know Components**
- Ibandronate Sodium Monohydrate
- CAS #: 138926-19-9
- Revision Date:

**California Prop 65 Components**
This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

Section 16. Other Information

**Other Information**
The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.