**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- **1.1 Product identifier**
  - **Product name:** Ibandronate Sodium Monohydrate
  - **Part number:** MM1326.00-0250
  - **CAS Number:** 138926-19-9
  - **EC number:** 639-757-2

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - No further relevant information available.
  - **Application of the substance / the mixture** Reference material for laboratory use only

- **1.3 Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** LGC Limited
    - Tel :+44 (0) 20 8943 7000
    - Fax :+44 (0) 20 8943 2767
    - eMail : gb@lgcstandards.com
    - Web : www.lgcstandards.com

  - **Further information obtainable from:**
    - Product safety department
    - eMail : sds-request@lgcgroup.com
  - **1.4 Emergency telephone number:** +44 (0) 20 8943 7000 (Monday - Friday : 8am - 5pm)

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**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**
    - GHS07
    - Acute Tox. 4 H302 Harmful if swallowed.

- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
    - The substance is classified and labelled according to the CLP regulation.
  - **Hazard pictograms**
    - GHS07

- **Signal word Warning**
- **Hazard statements**
  - H302 Harmful if swallowed.
- **Precautionary statements**
  - P264 Wash thoroughly after handling.

(Contd. on page 2)
**Product name:** Ibandronate Sodium Monohydrate

- **P270** Do not eat, drink or smoke when using this product.
- **P301+P312** IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- **P330** Rinse mouth.
- **P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
  - **CAS No. Description**
    - 138926-19-9 Ibandronate Sodium Monohydrate
  - **Identification number(s)** None
  - **EC number:** 639-757-2
  - **RTECS:** -
  - **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
  - **General information:**
    - Symptoms of poisoning may occur even after several hours; therefore medical observation for at least 48 hours after the accident is recommended.
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
  - **After eye contact:** Rinse opened eye for several minutes under running water.
  - **After swallowing:** Rinse mouth. Do not induce vomiting.
    - Seek medical treatment.
  - **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
  - **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
  - **Suitable extinguishing agents:** Use fire extinguishing methods suitable for surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**
  - Formation of toxic gases is possible during heating or in case of fire.
5.3 Advice for firefighters

- Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures: Wear protective clothing.
- 6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
- 6.4 Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling: Store in cool, dry place in tightly closed receptacles.
- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles:
      - Please refer to the manufacturer's certificate for specific storage and transport temperature conditions.
      - Store only in the original receptacle unless other advice is given on the CoA.
      - Keep container in a well-ventilated place. Keep away from sources of ignition and heat.
    - Information about storage in one common storage facility: Store away from foodstuffs.
    - Further information about storage conditions: None.
- 7.3 Specific end use(s): No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 Control parameters
  - Ingredients with limit values that require monitoring at the workplace: Not required.
- 8.2 Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures: Wash hands before breaks and at the end of work.
    - Respiratory protection: Not required.
    - Use suitable respiratory protective device in case of insufficient ventilation.
  - Protection of hands:
    - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
    - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374

**Protective gloves**

- **Material of gloves**: Nitrile rubber, NBR
- **Penetration time of glove material**: The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection**: Safety glasses

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### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance**:
    - **Form**: Solid
    - **Colour**: White
  - **Odour**: Odourless
  - **Odour threshold**: Not determined.
  - **pH-value**: Not applicable.
  - **Change in condition**
    - **Melting point/freezing point**: 249-262 °C
    - **Initial boiling point and boiling range**: Not determined.
  - **Flash point**: Not applicable.
  - **Flammability (solid, gas)**: Not determined.
  - **Ignition temperature**: Not determined.
  - **Decomposition temperature**: Not determined.
  - **Auto-ignition temperature**: Not determined.
  - **Explosive properties**: Not determined.
  - **Explosion limits**:
    - **Lower**: Not determined.
    - **Upper**: Not determined.
  - **Vapour pressure**: Not applicable.
  - **Density**: Not determined.
  - **Relative density**: Not determined.
  - **Vapour density**: Not applicable.
  - **Evaporation rate**: Not applicable.
Product name: Ibandronate Sodium Monohydrate

- Solubility in / Miscibility with water: Not determined.
- Partition coefficient: n-octanol/water: Not determined.
- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity
  Stable under normal conditions.
  No further relevant information available.
- 10.2 Chemical stability
  Stable under normal conditions.
- Thermal decomposition / conditions to be avoided:
  Formation of toxic gases is possible during heating or in case of fire.
- 10.3 Possibility of hazardous reactions
  No dangerous reactions known.
- 10.4 Conditions to avoid
  Heat.
- 10.5 Incompatible materials: Strong oxidizing agents.
- 10.6 Hazardous decomposition products:
  Formation of toxic gases is possible during heating or in case of fire.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity
  Harmful if swallowed.
- Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.

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Product name: Ibandronate Sodium Monohydrate

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
  - General notes:
    Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
    Do not allow undiluted product to reach ground water, water course or sewage system.
  - 12.5 Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  - European waste catalogue
    Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
  - Uncleaned packaging:
    - Recommendation: Dispose of in accordance with national regulations.

SECTION 14: Transport information

- 14.1 UN-Number
  - ADR, IMDG, IATA Not applicable
  - ADR, IMDG, IATA Not applicable
- 14.3 Transport hazard class(es)
  - ADR, ADN, IMDG, IATA Not applicable
  - Class Not applicable
- 14.4 Packing group
  - ADR, IMDG, IATA Not applicable
- 14.5 Environmental hazards:
  Not applicable.
- 14.6 Special precautions for user
  Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
  Not applicable.
- UN "Model Regulation":
  Not applicable.
SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user’s intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

Abbreviations and acronyms:
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Acute toxicity – Category 4

Sources

Data compared to the previous version altered. All sections have been updated.