

1- Identification of the substance/preparation and of the company/undertaking

- **PRODUCT NAME:** Enterocin
- **PRODUCT NUMBER:** PB0019
- **CAS #:** 59678-46-5
- **SYNONYMS:** Vulgamycin
- **MOLECULAR FORMULA:** C₂₂H₂₀O₁₀
- **MOLECULAR WEIGHT:** 444.4
- **DETAILS OF THE MANUFACTURER:**

INSTITUTO BIOMAR, S.A.
PARQUE TECNOLÓGICO DE LEÓN PARCELA M10.4
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2- Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description:** 59678-46-5 Enterocin
- **Identification number(s):** Not applicable

3- Hazards identification

- **PHYSICAL/CHEMICAL HAZARDS:** Not determined
- **HUMAN HEALTH HAZARDS:** Not determined

4- First-aid measures

Description of first aid measures

- **General information:** Consult a physician. Show this safety data sheet to the doctor in attendance.
- **AFTER INHALATION:** : If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

- **AFTER INGESTION:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
- **AFTER SKIN CONTACT:** Wash off with soap and plenty of water. Consult a physician.
- **AFTER EYE CONTACT:** Rinse opened eye for several minutes under running water. Check for and remove contact lenses. If symptoms persist, consult a physician.
- **AFTER AGGRAVATING CONDITIONS:**

Indication of any immediate medical attention and special treatment needed.

No further relevant information available

5- Fire-fighting measures

- **FLAMMABILITY OF THE PRODUCT:**
- **EXTINGUISHING MEDIA:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **HAZARDOUS THERMAL (de) COMPOSITION PRODUCTS:** No further relevant information available.
- **SPECIAL FIRE-FIGHTING PROCEDURES:**
- **PROTECTION OF FIRE-FIGHTERS:** Wear self-contained respiratory protective device. Do not inhale explosion gases or combustion gases. Wear fully protective suit.

6- Accidental release measures

- **PERSONAL PRECAUTIONS PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:**
Avoid formation of dust.
Wear protective clothing.
- **ENVIRONMENTAL PRECAUTIONS:** No special measures required.
- **METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7- Handling and storage

- **HANDLING PRECAUTIONS FOR SAFE HANDLING:** No special measures required.
- **STORAGE CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**
Store tightly sealed in a cool, dry and well ventilated location (see label for storage temperature and additional specific information). Keep away from heat, sources of ignition and incompatibles such as oxidizing agents.

8- Exposures controls / personal protection

- **ADDITIONAL INFORMATION ABOUT DESIGN OF TECHNICAL FACILITIES:** No further data.
- **CONTROL PARAMETERS INGREDIENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE:** Not required.
- **EXPOSURE CONTROLS:**
- **PERSONAL PROTECTIVE EQUIPMENT:**
 - **Skin and body:** Protective gloves. The glove material has to be impermeable and resistant to the product/ the substance/ thepreparation.
Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
 - **Eyes:** Safety glasses
- **RESPIRATORY PROTECTIONS:** Work in a fumehood.
- **GENERAL HIGIENIC MEASURES:** The usual precautionary measures when handling chemicals.

9- Physical and chemical properties

- **INFORMATION ABOUT BASIC PHYSICAL AND CHEMICAL PROPERTIES:**
- **APPEARANCE:** Solid
- **COLOR:** Brownish
- **MOLECULAR WEIGHT:** 444.4
- **SOLUBILITY:** Good in MeOH, EtOAc, acetone, water, Pyridine, base, fairly in CH₂Cl₂, Et₂O
- **FLASH POINT:** Not applicable
- **EXPLOSIVE PROPERTIES:** Product does not present an explosion hazard.

10-Stability and reactivity

- **REACTIVITY:**
- **CHEMICAL STABILITY:** Stable. Avoid strong oxidizing agents.
- **THERMAL DECOMPOSITION:** No decomposition if used according to specifications.
- **CONDITIONS TO AVOID:** No further relevant information available.
- **HAZARDOUS DECOMPOSITION PRODUCTS:** No dangerous decomposition products known.
- **INCOMPATIBLE MATERIALS:** No further relevant information available.

11-Toxicological information

- **RTECS#:**
- **LOCAL EFFECTS:**
- **SKIN IRRITATION:** Not determined
- **ACUTE TOXICITY:** LD50=(1000/500, ip) (1000, per os)
- **CHRONIC TOXICITY:** Not data available
- **OTHER TOXI EFFECTS ON HUMANS:** Not data available
- **CARCINOGENIC EFFECTS: MUTAGENIC EFFECTS:** Not data available
- **REPRODUCTION TOXICITY:** Not data available
- **TERATOGENIC EFFECTS:** Not data available

12-Ecological information

- **ECOTOXICITY:** No further relevant information available.
- **TOXICITY OF THE PRODUCTS OF:** No further relevant information available.
- **BIODEGRADATION: (Persistence and degradability)** No further relevant information available.

13-Disposal considerations:

- **METHODS OF DISPOSAL: WASTE OF RESIDUES;** Smaller quantities can be disposed of with household waste.
CONTAMINATED PACKAGING: Disposal must be made according to official regulations.

14-Transport information

- **UN-Number** Not applicable
- **UN proper shipping name** Not applicable
- **Transport hazard class(es)** Not applicable
- **Packing group** Not applicable
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable

15-Regulatory information

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

16-Other information

It is the user`s responsibility to determine the suitability of this information for adoption of necessary safety precautions. ***This product is intended for research use only*** and should be handled and used only by experienced personnel. Instituto Biomar S.A shall not be held liable for any damage resulting from the use of this product.