

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

- **PRODUCT NAME:** Wortmannin from microbial source
- **PRODUCT NUMBER:** JU0027
- **CAS #:** 19545-26-7
- **SYNONYMS:** SL-2052
- **MOLECULAR FORMULA:** C₂₃H₂₄O₈
- **MOLECULAR WEIGHT:** 428 g/mol
- **DETAILS OF THE MANUFACTURER:**

BIOMAR MICROBIAL TECHNOLOGIES
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2- Composition/information on ingredients

- **Chemical characterization:** Substance
 - **CAS No. Description:** 19545-26-7 Wortmannin
 - **Identification number(s):** Not applicable

3- Hazards identification

- **PHYSICAL/CHEMICAL HAZARDS:** Not available
- **HUMAN HEALTH HAZARDS:** May be fatal if swallowed, inhaled, or absorbed through skin. Material may be irritating to the mucous membranes and upper respiratory tract. May cause eye, skin, or respiratory system irritation. To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

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. DO NOT INDUCE VOMITING. Consult a physician.
- **AFTER SKIN CONTACT:** Wash off with soap and plenty of water. Remove contaminated clothing. 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.

May cause gastric or myocardial hemorrhage.

5- Fire-fighting measures

- **FLAMMABILITY OF THE PRODUCT:** Not available
- **EXTINGUISHING MEDIA:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.
- **HAZARDOUS THERMAL (de) COMPOSITION PRODUCTS:** Carbon monoxide and carbon dioxide.
- **SPECIAL FIRE-FIGHTING PROCEDURES:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- **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:** Wear appropriate respirator, rubber boot and heavy rubber gloves. Scoop up and place in an appropriate container. Ventilate area and wash spill site after pickup is complete. Wash skin immediately with plenty of water.
- **ENVIRONMENTAL PRECAUTIONS:** Do not allow product to enter drains.
- **METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:** Absorb on sand or vermiculite and place in closed containers for disposal. Clean spillage area thoroughly with plenty of water.

7- Handling and storage

- **HANDLING PRECAUTIONS FOR SAFE HANDLING:** Use caution when handling. Exposure to any chemical should be limited. Avoid prolonged exposure. Avoid all direct contact with product. Wear protective safety goggles. Wear chemical-resistant gloves. Wear protective clothing and boots. Ensure ventilation during use.
- **STORAGE CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. For long term storage, keep the container closed and dry at -20° C.

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 and clothing. The glove material has to be impermeable and resistant to the product.
Due to missing tests no recommendation to the glove material can be given for the product. 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 fume hood.
- **GENERAL HIGIENIC MEASURES:** The usual precautionary measures when handling chemicals.

9- Physical and chemical properties

- **INFORMATION ABOUT BASIC PHYSICAL AND CHEMICAL PROPERTIES:**
- **APPEARANCE:** Amorphous solid
- **COLOR:** Yellowish
- **MOLECULAR WEIGHT:** 428
- **SOLUBILITY:** good in EtOH, MeOH, Et₂O, Benz, Chloroform, CCl₄, fairly in Water, hardly in Hex. ~0.1 mg/ml in 1:8 DMSO:PBS (pH 7.2); ~0.15 mg/ml in EtOH; ~14 mg/ml in DMF & DMSO.
- **FLASH POINT:** Not determined.
- **EXPLOSIVE PROPERTIES:** Not determined.

10-Stability and reactivity

- **REACTIVITY:** Not determined
- **CHEMICAL STABILITY:** Stable under normal conditions
- **THERMAL DECOMPOSITION:** Not determined
- **CONDITIONS TO AVOID:** Heat, flames and sparks.
- **HAZARDOUS DECOMPOSITION PRODUCTS:** Not determined.
- **INCOMPATIBLE MATERIALS:** Strong acids and bases.

11-Toxicological information

- **RTECS#:** Not available
- **LOCAL EFFECTS:** Not determined
- **SKIN IRRITATION:** Not determined.
- **ACUTE TOXICITY:** The toxicological effects of this product have not been thoroughly studied.
- Wortmannin - Toxicity Data: Intraperitoneal LD50 (mouse): 18 mg/kg; Oral TDLo (rat): 10 mg/kg;
- **CHRONIC TOXICITY:** Not determined
- **OTHER TOXIC EFFECTS ON HUMANS:** Not determined
- **CARCINOGENIC EFFECTS:** Not determined
- **MUTAGENIC EFFECTS:** Not determined
- **REPRODUCTION TOXICITY:** Not determined
- **TERATOGENIC EFFECTS:** Not determined

12-Ecological information

- **ECOTOXICITY:** Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.
- **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:** Dispose in accordance with local, state, and federal regulations.
- **CONTAMINATED PACKAGING:** Disposal must be made according to official regulations.

14-Transport information

- **UN-Number:** 2811
- **UN proper shipping name** ADR/RID: 2811
IMDG: 2811
IATA: 2811
- **Transport hazard class(es)** 6.1.
- **Packing group** I
- **Environmental hazards:** Not determined
- **Marine pollutant:** Not determined
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable

15-

16-Regulatory information

· · Chemical safety assessment:



H300: Fatal if swallowed.
H310: Fatal in contact with skin.
H330: Fatal if inhaled.

17-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. Biomar Microbial Technologies shall not be held liable for any damage resulting from the use of this product.