

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

- **PRODUCT NAME:** Brefeldin A
- **PRODUCT NUMBER:** CL0003
- **CAS #:** 20350-15-6
- **SYNONYMS:** Ascotoxin, Decumbin, Cyanein, Nectrolide, Synergisidin
- **MOLECULAR FORMULA:** C₁₆H₂₄O₄
- **MOLECULAR WEIGHT:** 280.36 g/mol
- **DETAILS OF THE MANUFACTURER:**

INSTITUTO BIOMAR, S.A.
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2- Composition/information on ingredients

Chemical characterization: Substances

- **CAS No. Description:** 20350-15-6 Brefeldin A
- **Identification number(s):** Not applicable

3- Hazards identification

- **PHYSICAL/CHEMICAL HAZARDS:** Not available
- **HUMAN HEALTH HAZARDS:**
 - Caution. May be harmful if inhaled, absorbed through skin or swallowed.
 - May cause irritation to eyes, mucous membranes, upper respiratory tract and skin.
 - May cause irritation of the digestive tract.

4- First-aid measures

Description of first aid measures

- **AFTER 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.
- **AFTER INGESTION:** Never give anything by mouth to an unconscious person. Get medical aid. Do not induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupful of milk or water.
- **AFTER SKIN CONTACT:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
- **AFTER EYE CONTACT:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
- **AFTER AGGRAVATING CONDITIONS:** Not available

Indication of any immediate medical attention and special treatment needed.

Indication of an antidote if applicable.

5- Fire-fighting measures

- **FLAMMABILITY OF THE PRODUCT:** Material is non-combustible.
- **EXTINGUISHING MEDIA:** Use water spray, dry chemical, carbon dioxide or appropriate foam.
- **HAZARDOUS THERMAL (de) COMPOSITION PRODUCTS:** These products are carbon oxides (CO, CO₂) and nitrogen oxides.
- **SPECIAL FIRE-FIGHTING PROCEDURES:** Wear protective clothing to prevent contact with skin and eyes.
- **PROTECTION OF FIRE-FIGHTERS:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6- Accidental release measures

- **PERSONAL PRECAUTIONS PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Wear respiratory protection and appropriate protective clothing. Avoid dust formation. Avoid breathing vapours, mist or gas. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.
- **SPILLS AND LEAKS:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container.
- **METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. For spill clean-up, wear suitable protective clothing, chemical resistant rubber gloves, rubber boots, and chemical safety goggles.

7- Handling and storage

- **HANDLING PRECAUTIONS FOR SAFE HANDLING:**
 - Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
 - Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation.
- **CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**
 - Store in a tightly closed container. Protect from light. Store in a cool, dry, well-ventilated area away from incompatible substances. Store at -20°C.

8- Exposures controls / personal protection

- **ENGINEERING MEASURES:** Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits. If user operation generates dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- **HYGIENE MEASURES:** Manipulate with all hygienic conditions and taking into consideration all security measures.
- **PERSONAL PROTECTIVE EQUIPMENT**
 - Respiratory protection:** Wear appropriate respiratory when ventilation is inadequate. Use respirators and components tested and approved under appropriate government standards.
 - Skin and body protection:** Lab coat. Choose the body protection according to the amount and concentration of the dangerous substance at the work place.
 - Eyes Protection:** Wear appropriate protective eyeglasses or chemical safety goggles.

9- Physical and chemical properties

- **PHYSICAL STATE:** Solid.
- **COLOR:** White.
- **SOLUBILITY:** Clear colourless solution to 1mg/ml in MeOH, acetone, ethyl acetate or DMSO.
- **MELTING POINT:** For batch specific information, please see CoA (certificate of analysis).
- **EXPLOSIVE PROPERTIES:**
 - Risk of explosion of the product in presence of mechanical impact. Not available.
 - Risk of explosion of the product in presence of static discharge. Not available.

10-Stability and reactivity

- **STABILITY:** Stable under recommended storage conditions.
- **REACTIVITY:** Not determined
- **CHEMICAL STABILITY:** Not determined
- **THERMAL DECOMPOSITION:** Not determined
- **INCOMPATIBILITIES:** Protect from light. Protect from heat. Strong oxidizing agents.
- **HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide and nitrogen oxides.

11-Toxicological information

- **RTECS#:** GY8410000 See actual entry in RTECS for complete information.
- **ACUTE TOXICITY:** LD50 Oral-rat 275 mg/kg. LD50 IPR-mouse 250 mg/kg
- **CHRONIC TOXICITY:** Not determined
- **OTHER TOXIC EFFECTS ON HUMANS:** Toxic if swallowed. Material is irritating to mucous membranes and upper respiratory tract.
- **CARCINOGENIC EFFECTS:** Not determined
- **MUTAGENIC EFFECTS:** Not determined
- **REPRODUCTION TOXICITY:** Not determined
- **POTENTIAL HEALTH EFFECTS:**
 - Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.
 - Skin:** May cause skin irritation. May be harmful absorbed through the skin.
 - Eyes:** May cause eye irritation.
 - Ingestion:** Toxic if swallowed.
 - Target Organs:** Eyes; respiratory system; skin

12-Ecological information

- **ECOTOXICITY:** Not determined
- **TOXICITY OF THE PRODUCTS OF BIODEGRADATION:** Not determined

13-Disposal considerations:

- **METHODS OF DISPOSAL: WASTE OF RESIDUES, CONTAMINATED PACKAGING:**

Contact a licensed professional waste disposal service to dispose of this material. 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. Contaminated packaging must be disposed of as unused product.

14-Transport information

- **ADR/RID:** Non-dangerous goods
- **IMDG:** Non-dangerous goods
- **IATA:** Non-dangerous goods
- **This substance is considered to be not hazardous for transport.**

15-Regulatory information

SYMBOL, ABBREVIATION AND DESCRIPTION OF HAZARD

Xn: Chemicals that may cause damage to health.



RISK PHRASES

R25 Toxic if swallowed

SAFETY PHRASES

S22 Do not breathe dust
S24/25 Avoid contact with skin and eyes
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

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.