

Safety Data Sheet


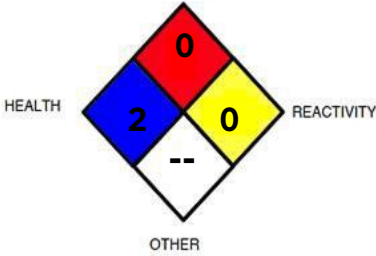
Section 1: Product & Company Identification

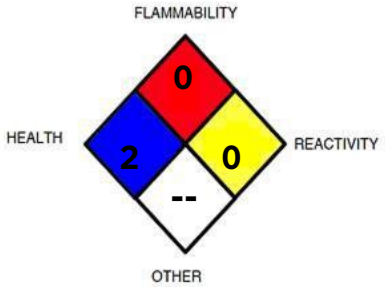
Product Name:	Brefeldin A
Product #:	B-1009
Synonyms:	BFA; 1,6,7,8,9,11a,12,13,14,14a-Decahydro-1,13-dihydroxy-6-methyl-4H-cyclopent[f]oxacyclotridecin-4-one; Decumbin; Ascotoxin; γ ,4-Dihydroxy-2-(6-hydroxy-1-heptenyl)-4-cyclopentanecrotonic acid λ -lactone; Cyanein
Supplier:	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
Emergency Tele#:	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

Section 2: Composition / Information on Ingredients

Component	CAS#	Classification	% Composition
Brefeldin A	20350-15-6	Acute Tox. 3; H301	100

Section 3: Hazards Identification

Symbols	
HMIS Classification	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>

NFPA Classification	
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Section 4: First Aid Measures

General Overview:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin:	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
Eyes:	Flush eyes with water as a precaution.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
	See section 11 for more detailed information on health effects & symptoms

SECTION 5: Fire Fighting Measures

Flammability of the product:	No data available
Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Hazardous thermal (de)composition products:	Carbon oxides
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus for firefighting if necessary.
Flash Point:	No data available

Section 6: Accidental Release Measures

Personal Precautions:	Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.



Methods for Clean-up:	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
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SECTION 7: Handling & Storage

Storage:	Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature 2 - 8 °C. Keep in a dry place. Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects.
Handling:	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	 <p>Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).</p>
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Skin and Body:	  <p>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.</p> <p>Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm</p>
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	<p>Break through time: 480 min Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)</p> <p>Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)</p> <p>If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.</p> <p>Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.</p>
Eyes:	 <p>Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).</p>
Ventilation/Engineering Measures:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Hygiene:	N/A
Other:	N/A

SECTION 9: Physical and Chemical Properties

Appearance & Odor:	White powder
Formula	$C_{16}H_{24}O_4$
Molecular Wt.	280.36
Melting Pt.	200°C
Boiling Pt.	No data available
Density:	No data available
Vapor Pressure:	No data available

Evaporation Rate:	No data available
Vapor Density:	No data available
Solubility:	Methanol 0.01 g/L at -20°C; DMSO 0.01 g/L at -20°C
Flash Point:	No data available
Autoignition Temp:	No data available

SECTION 10: Stability and Reactivity

Stability:	Stable under recommended storage conditions
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions: Carbon oxides
Materials to Avoid:	Strong oxidizing agents
Conditions to avoid:	N/A

SECTION 11: Toxicological Information

RTECS#:	GY8410000
ACUTE Toxicity:	Oral (Category 3) LD50 Oral - Rat - 275 mg/kg Inhalation: No data available Dermal: No data available
CHRONIC Toxicity:	May cause cyanosis., Brefeldin A a metabolite of the fungus <i>Eupenicillium brefeldianum</i> , specifically and reversibly blocks protein transport from the endoplasmic reticulum to the Golgi apparatus in many cell-types and species., Gastrointestinal disturbance.
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	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. AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or, anticipated human carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or, potential human carcinogen by OSHA. EPA: No classification on carcinogenic data is available from EPA

SECTION 12: Ecological Information

Ecotoxicity:	No data available
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Mobility:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Other adverse effects:	No data available
Corrosivity Characteristic:	No data available
General Notes:	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

SECTION 13: Disposal Considerations

Residue Waste or Unused product:	Offer surplus and non-recyclable solutions to a licensed disposal company. 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.
Contaminated Packaging:	Dispose of as unused product.

SECTION 14: Transportation Information

UN ID#:	2811
ADR / RID (LAND):	N/A
DOT regulations:	UN number: 2811 Class: 6.1 Packing group: III Proper shipping name: Toxic solids, organic, n.o.s. (Brefeldin A) Poison Inhalation Hazard: No
IMDG/IMO (SEA):	UN number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Brefeldin A)
IATA/DGR (AIR):	UN number: 2811 Class: 6.1 Packing group: III Proper shipping name: Toxic solid, organic, n.o.s. (Brefeldin A)
Special Provisions:	N/A

SECTION 15: Regulatory Information

Health Phrases:	H301 Toxic if swallowed H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Risk Phrases:	N/A
Safety Phrases:	P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal

	plant.
EU Regulations:	N/A
US Regulations:	TSCA: California Proposition 65:
U.S. Federal Regulations:	SARA 302/304/311/312 extremely hazardous substances: No products were found SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found. SARA 313 toxic chemicals notification and release reporting: No products were found. Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: No Products were found.
WHMIS (Canada):	N/A

SECTION 16: Other Information

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