

Safety Data Sheet: Brefeldin A

1) Identification of the substance/mixture and of the Company

Product identifiers			
Product name	Brefeldin A		
Product Code	BR	Formula	C16H24O4
CAS #	20350-15-6	RTECS	GY8410000
EC Number #	606-528-3		
Intended uses of the substance or mixture and uses advised against			
Intended use		Uses advised against:	
Only for Research and/or Development		Not for drug, Not to be used in humans or animals. Not food additive	
Details of the supplier of the safety data sheet		Emergency Telephone number	
FERMENTEK ltd 4 Yatziv street, POB 47120 Jerusalem 97800, Israel		For chemical emergency spill, leak, fire, exposure, or accident calls CHEMTREC day or night: Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887	
Tel: +972 2 5853953 Fax: +972 2 5853943 eMail: fermentek@fermentek.com Website: www.fermentek.com			
This company is the manufacturer of the product, and the supplier of the safety data sheet			

REACH
A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

2) Hazards identification

Classification of the substance or mixture

GHS Classification:

Acute Toxicity, Oral (Category 3) H301 Toxic if swallowed.

GHS Label elements, including precautionary statements



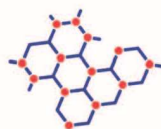
Pictogram: Signal word: {DANGER}

GHS Hazard Statements

H301: Toxic if swallowed.

GHS Precautionary Statements

P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.



3) Composition/information on ingredients

Substance

Substance name:	Brefeldin A
	CAS Registry #: 20350-15-6 EC#: 606-528-3
	Molecular Formula: C ₁₆ H ₂₄ O ₄ Molecular Weight: 280,36
	Acute Toxicity, Oral (Category 3)
	Concentration (Amount) <100%

Mixture

Not mixture.

4) First Aid Measures

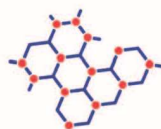
4.1 Description of First Aid Measures

General advice:	If medical attention is required, show this safety data sheet to the doctor.
Eye contact:	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact:	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician.
Ingestion:	Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and drink afterwards plenty of water. Call a physician
Inhalation:	Immediate medical attention is required Remove to fresh air If not breathing, give artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary Call a physician Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician
Self-protection of the first aider:	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

5) Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	None
Hazardous combustion products	Carbon oxides,
Advice for firefighters	Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit.



6) Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up: Cover liquid spill with sand, earth or other non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, and vermiculite). Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal.

7) Handling and storage

Precautions for safe handling

Advice on safe handling: Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep container tightly closed in a dry and well-ventilated place.

Keep out of the reach of children.

Store at -20 °C.

Incompatible materials: None known based on information available.

8) Exposure Controls/Personal Protection

No occupational exposure limits are listed for this material.

OSHA Permissible Exposure Limits No Data Available

NIOSH Recommended Exposure Limits No Data Available

ACGIH Threshold Limit Values No Data Available

Exposure controls

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations, Ventilation systems

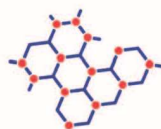
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Use fumehood for routine work.

Personal protective equipment

The employer/end user, prior to use of this product should perform all recommendations below are advisory in nature and a risk assessment. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.

[PPE=Personal Protection Equipment]

PPE: Respiratory protection Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (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).



PPE: Hand Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices, and wash and dry hands

PPE: Eye Protection: Use a 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)

PPE: Skin and Body Protection: Handle with gloves. Wear protective clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place. When deemed needed according to the concentration and amount of this product, use a complete body suit

9) Physical and chemical properties

Physical / chemical properties

Physical State at room temperature	Solid / powder
Color	White
Melting/freezing point	200-210 °C

No further safety-relevant information is available

10) Stability and reactivity

Reactivity: No information available.

Chemical stability: Stable under normal conditions.

Conditions to avoid Heat, flames and sparks. Sunlight.

Incompatible materials Strong reducers and oxidizers

Possibility of Hazardous Reactions None under normal processing

Hazardous decomposition products: Carbon oxides, Nitrogen oxides

11) Toxicological information

Information on toxicological effects

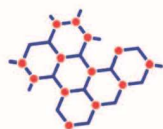
The toxicological effects of this product have not been thoroughly studied.

Acute Toxicity (Oral)	LD50 (oral - rat)	275 mg/kg
Skin corrosion/irritation:	No data available	
Serious eye damage/eye irritation:	No data available	
Respiratory or skin sensitization:	No data available	
Germ cell mutagenicity:	No data available	
Carcinogenicity:	No data available	
Reproductive toxicity / Teratogenicity:	No data available	
STOT-SE – single exposure (GHS):	No data available	
STOT-RE – repeated exposure (GHS):	No data available	
Aspiration hazard:	No data available	
Additional information:	RTECS: GY8410000	

12) Ecological Information

Eco-Toxicity No further relevant information available

Other adverse effects No further relevant information available.



13) Disposal Considerations

Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations
Contaminated packaging	Dispose of as unused product

14) Transport information

UN number, Proper Shipping Name, Transport Hazard Class, packing group

	US DOT	ADR/RID:	IMDG:	IATA
UN Number UN proper shipping name	3462 Toxins, extracted from living sources, solid, n.o.s. (Brefeldin A)	3462 Toxins, extracted from living sources, solid, n.o.s. (Brefeldin A)	3462 Toxins, extracted from living sources, solid, n.o.s. (Brefeldin A)	3462 Toxins, extracted from living sources, solid, n.o.s. (Brefeldin A)
Transport Hazard Class & Packing Group	6.1 Pg III	6.1 Pg III	6.1 Pg III	6.1 Pg III

15) Regulatory information

Safety, health and environmental regulations/legislation

USA EPA / TSCA	This product is not listed on the USA EPA TSCA
EU ECHA Status	This product is not registered with the EU ECHA
CA: DSL/NDSL Status	This product is not listed on the Canadian DSL/NDSL

Chemical Safety Assessment

For this product, a chemical safety assessment was not carried out.

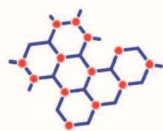
U.S. Federal Regulations

TSCA 12(b) N.A.

SARA 313 N.A.

SARA 311/312 Hazardous Categorization

Acute Health Hazard No
 Chronic Health Hazard No
 Fire Hazard No
 Reactive Hazard No
 Clean Water Act N.A.
 Clean Air Act N.A.
 OSHA Occupational Safety and Health Administration N.A.



16) Other information

Date of revision: 28 May 2017

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given here is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS