



Safety Data Sheet: Ophiobolin-A

Section 1. Identification of the substance/mixture and of the Company

Product identifiers			
Product name	Ophiobolin-A	EC Number #	636-934-6
Product Code	OPA	Formula	C ₂₅ H ₃₆ O ₄
CAS #	4611-05-6	RTECS	RL1576000
		MW	400.55

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	Tel: +972 2 5853953 Fax: +972 2 5853943 eMail: fermentek@fermentek.com Website: www.fermentek.com
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	
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.	

Section 2. Hazards identification

Classification of the substance or mixture

According to Regulation (EC) No. 1272/2008.

GHS Classification:

Acute Toxicity, Oral	(Category 3)	H301	Toxic if swallowed
Acute Toxicity, Dermal	(Category 4)	H312	Harmful in contact with skin
Acute Toxicity, Inhalation	(Category 4)	H332	Harmful in contact if inhaled

GHS Label elements, including precautionary statement

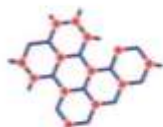
Signal word:	Danger	Pictogram	
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Hazard statement(s)

H301	Toxic if swallowed.
H312 + H332	Harmful in contact with skin or if inhaled

Precautionary statement(s)

P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product
P280	Wear protective gloves/ protective clothing.
P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
P302 + P352 + P312	IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P501	Dispose of contents/ container to an approved waste disposal plant.



Section 3. *Composition/information on ingredients*

Substance	
Substance name:	Ophiobolin-A
	CAS Registry #:4611-05-6 EC#:636-934-6
	Molecular Formula: C ₂₅ H ₃₆ O ₄ Molecular Weight: 400.55
Mixture	Not mixture.

Section 4. *First Aid Measures*

Description of First Aid Measures

General advice:	If medical attention is required, show this safety data sheet to the doctor.
Eye contact:	Flush eyes with water as a precaution.
Skin Contact:	Wash off with soap and plenty of water.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water.
Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Section 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, Nitrogen oxides
Advice for firefighters	Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit.

Section 6. *Accidental release measures*

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid dust formation. Avoid breathing vapours, mist or gas.

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.

Section 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.



Section 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

General industrial hygiene practice. 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

Section 9. Physical and chemical properties

Physical State at room temperature	Solid / powder
Color	
No further safety relevant data are available	

Section 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



Section 11. Toxicological information

Information on toxicological effects

To the best of our knowledge, the chemical, physical and toxicological properties of this product have not been thoroughly investigated.

Acute Toxicity	LD50 Oral - Mouse - 238 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 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.
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: RL1576000

Section 12. Ecological Information

Eco-Toxicity	No further relevant information available
Other adverse effects	No further relevant information available

Section 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

Section 14. Transport information

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

	US DOT	ADR/RID:	IMDG:	IATA
UN Number	Not regulated	Not regulated	Not regulated	Not regulated
UN proper shipping name				
Transport Hazard Class & Packing Group	Not regulated	Not regulated	Not regulated	Not regulated
			Not marine pollutant	

Section 15. Regulatory information

Safety, health and environmental regulations/legislation	
USA EPA / TSCA	This product is not listed on the USA EPA TSCA (For research only)
SARA 313	Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
US SARA 311/312	Acute health hazard Yes Chronic Health Hazard No Fire hazard No Sudden release of pressure hazard No Reactive hazard No



EU ECHA Status	This product is not registered with the EU ECHA
EU CLP	Listed.
CA: DSL/NDSL Status	This product is not listed on the Canadian DSL/NDSL

Section 16. *Other information*

Date of revision: 26 VIII 2018

Comments

- ❖ Information source for toxicity data
85GDA2 "CRC Handbook of Antibiotic Compounds," Vols.1- , Berdy, J., Boca Raton, FL, CRC Press,
1980- Volume(issue)/page/year: 6,143,1981

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