



Safety Data Sheet: Mithramycin

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

1.1. Product identifiers

Product name	Mithramycin A	Formula	C₅₂H₇₆O₂₄
Product Code	MT	RTECS	PZ2800000
CAS #	18378-89-7	Molecular weight	1085.16
EC Number #	634-048-4		
Date of version	<27 February, 2020>	Substance?Mixture?	Substance

1.2. Intended uses of the substance or mixture and uses advised against

Intended use:	Uses advised against:
Research and development. Laboratory reagent. Reference material. Manufacturing of substances.	Not for drug, Not to be used in humans or animals. Not food additive

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency Telephone number

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

1.5. 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

2.1. Classification of the substance or mixture

GHS Classification:

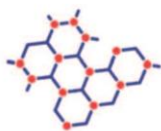
Ingestion	Category 4	H302	Harmful if swallowed
Reproductive toxicity	Category 2	H361d	Possible risk of damaging the unborn child. Possible risk of impaired fertility

GHS Label elements, including precautionary statements

Pictogram:  Signal word: {WARNING}

GHS Hazard Statements

H361	Suspected of damaging fertility or the unborn child
H302	Harmful if swallowed



GHS Precautionary Statements

P261	Avoid breathing {dust/fume/gas/mist/vapors/spray}.
P264	Wash {hands} thoroughly after handling.
P280	Wear {protective gloves/protective clothing/eye protection/face protection}.
GHS Response Phrases:	
P201	Obtain special instructions before use.
P308+313	If exposed or concerned: Get medical advice/attention

3. Composition/information on ingredients

Substance	
Substance name:	Mithramycin
Concentration	100%
	CAS Registry #: 18378-89-7 EC#: 634-048-4
	Molecular Formula: C₅₂H₇₆O₂₄ ; Molecular Weight: 1085.16
Mixture?	Substance

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:	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:	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. If symptoms persist, call a physician

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	None

5.2. Other information

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

6.1. Personal precautions, protective equipment and emergency procedures

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

Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
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6.3. 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

7.1. 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.
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7.2. 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

8.1. Exposure controls

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2. 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.



8.3. 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

9.1. Physical / chemical properties

Physical State at room temperature	Solid / powder
Color	Color Yellow powder
Melting/freezing point	175°C -195°C
No further safety relevant data are 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

11. Toxicological information

11.1. Information on toxicological effects

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

Acute Toxicity	LD50 (oral - mouse) 500 mg/kg
Skin corrosion/irritation:	No quantitative data available
Serious eye damage/eye irritation:	No quantitative data available
Respiratory or skin sensitization/corrosion:	Moderate respiratory tract irritation.
Germ cell mutagenicity:	No data available
Carcinogenicity:	Evidence of a carcinogenic effect in a structurally related compound. A structurally related compound has been designated by the IARC as Group 2B: Possibly carcinogenic to humans.
Reproductive toxicity / Teratogenicity:	Laboratory results on structurally similar molecules have shown reproductive toxicity/teratogenicity in animal models.
STOT-SE – single exposure (GHS):	No data available

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Aspiration hazard:	No data available
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11.2. Additional information

RTECS number	PZ2800000
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12. Ecological Information

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

13. Disposal Considerations

13.1. 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

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

	US DOT	US DOT	US DOT	US DOT
UN Number	Not regulated	Not regulated	Not regulated	Not regulated
UN proper shipping name				
Transport Hazard Class & Packing Group	Not dangerous goods	Not dangerous goods	Not dangerous goods	Not dangerous goods

15. Regulatory information

15.1. 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 registered with the EU ECHA, Number 634-048-4
CA: DSL/NDSL Status	This product is not listed on the Canadian DSL/NDSL

16. Other information

16.1. Date of revision: Thursday, 27 February, 2020

16.2. 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

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