



Safety Data Sheet: Mitomycin C

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

1.1. Product identifiers

Product name	Mitomycin C	Formula	C₁₅ H₁₈ N₄ O₅
Product Code	MI	RTECS	CN0700000
CAS #	50-07-7	Molecular weight	334.30
EC Number #	200-008-6	Substance? Mixture?	Substance
Synonyms			
Date of version	07-2020		

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

1.2.1. Intended use:	1.2.2. Uses advised against:
Research and development. Laboratory reagent. Reference material. For use by trained professionals only	Not for drug, Not to be used in humans or animals. Not food additive

1.3. Details of the safety data sheet supplier

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:


See section 15

2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1. **GHS Classification According to EU Reg. 1272/2008 and US OSHA 1910.1200)**

2.2. GHS Label elements, including precautionary statements

2.2.1. **Pictogram:** {  } **Signal word:** { **DANGER** }





2.2.2. GHS Hazard Statements

Acute toxicity	Oral	Category 2	H300: Fatal if swallowed
Carcinogenic		Category 2	H351 Suspected of causing cancer

2.2.3. GHS Precautionary Statements

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P262	Do not get in eyes, on skin, or on clothing
P264	Wash {hands} thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

2.2.4. GHS Response Phrases

P308 + P310	IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.
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3. Composition/information on ingredients

Substance	Hazardous components (REGULATION (EC) No 1272/2008)	
Substance name:	Mitomycin C	
Concentration	≥100%	
CAS Registry #:	50-07-7	
EC#:	200-008-6	
Molecular Formula:	C₁₅ H₁₈ N₄ O₅	
Molecular Weight:	334.30	
Classification	Acute toxicity, Category 2, H300 Carcinogenicity, Category 2, H351	
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 eyes with 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 with soap and plenty of water. Consult a physician.
Ingestion:	If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.
Inhalation:	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

	No data available
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4.3. Indication of any immediate medical attention and special treatment needed

No data available

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	Carbon dioxide, dry chemical or Halon extinguisher
Unsuitable extinguishing media	None known

5.2. Other information

Hazardous combustion products	Carbon oxides, Nitrogen oxides (NOx)
Advice for firefighters	Wear self-contained breathing apparatus for firefighting 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:	Clean-up should be dealt with only by qualified personnel familiar with the specific substance. 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, protected from light and moisture
Suitable packaging	Must only be kept in original packaging.

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Incompatible materials:	None known based on information available.
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8. Exposure Controls/Personal Protection

8.1. Control parameters

Control parameters	Components with workplace control parameters
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8.2. Exposure controls

Appropriate 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 fume-hood for routine work.
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8.3. Personal protective equipment

[PPE=Personal Protection 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: 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. 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. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

9. Physical and chemical properties

9.1. Physical / chemical properties

Physical State at room temperature	Solid / powder
Color	Blue to violet
Melting/freezing point	
Flash point	N.A.

No further safety relevant data are available

10. Stability and reactivity

Reactivity:	No information available.
Chemical stability:	Light sensitive

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Conditions to avoid	Heat, flames and sparks. Sunlight.
Incompatible materials	Strong reducers and oxidizers
Possibility of Hazardous Reactions	May react with nitrogen compounds such as nitrates, nitrites, nitrous acid, and strong oxidizers.
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.

11.1.1. Acute Toxicity	Oral, rat: LD50 30 mg/kg Oral, mouse: LD50 = 23 mg/kg
Skin corrosion/irritation:	No data available
Serious eye damage/eye irritation:	No data available
Respiratory or skin sensitization/corrosion:	No data available
11.1.2. Germ cell mutagenicity:	Mutagenic effects have been reported in experimental animals.
11.1.3. Carcinogenicity:	IARC: possibly carcinogenic to humans (group 2B)
11.1.4. Reproductive toxicity / Teratogenicity:	Adverse reproductive effects have been reported in experimental animals
STOT-SE – single exposure (GHS):	No data available
STOT-SE – repeated exposure (GHS):	No data available
11.1.5. Aspiration hazard:	No data available
11.1.6. Potential Health Effects	<ul style="list-style-type: none"> • Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. • Ingestion: May be harmful if swallowed • Skin: May be harmful if absorbed through skin. May cause skin irritation • Eyes: May cause eye irritation

11.2. Additional information

RTECS#	CN0700000
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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

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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 UN proper shipping name	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (Mitomycin C)	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (Mitomycin C)	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (Mitomycin C)	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (Mitomycin C)
Transport Hazard Class / Packing Group	6.1 / II	6.1 / II	6.1 / II	6.1 / II

14.2. Additional information

Excepted quantities (EQ)	Code: E4 Maximum net quantity per inner packaging: 1 g Maximum net quantity per outer packaging: 500 g
De Minimis	When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore, packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation

USA EPA / TSCA	This product is listed on the USA EPA TSCA
EU ECHA Status	This product is registered with the EU ECHA, Number 200-008-6 ANNEX III: Listed REACH: Preregistered
CA: DSL/NDSL Status	This product is listed on the Canadian DSL/NDSL

16. Other information

16.1. Date of revision: Thursday, 9 July, 2020

16.2. Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

16.3. Abbreviations

- LD50: Median lethal dose of a substance required to kill 50% of a test population.
- LC50: Medial lethal concentration of a substance required to kill 50% of a test population.
- LDLo: Lowest known lethal dose
- LDLo: Lowest known toxic dose
- IARC: International Agency for Research on Cancer
- NTP: National Toxicology Program
- RTECS: Registry of Toxic Effects of Chemical Substances





16.4. 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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