


 Safety Data Sheet: **Emodin**
**1. Identification of the substance/mixture and of the Company**
**1.1. Product identifiers**

<b>Product name</b>	<b>Emodin</b>	<b>Formula</b>	<b>C<sub>15</sub> H<sub>10</sub> O<sub>5</sub></b>
<b>Product Code</b>	<b>EM</b>	<b>RTECS</b>	<b>CB7920600</b>
<b>CAS #</b>	<b>518-82-1</b>	<b>Molecular weight</b>	<b>270.20</b>
<b>EC Number #</b>	<b>208-258-8</b>	<b>Substance?Mixture?</b>	<b>Substance</b>
<b>Synonyms</b>	<ul style="list-style-type: none"> <li>• Archin</li> <li>• Emodol</li> <li>• Frangula emodin</li> <li>• Frangulic acid</li> <li>• Rheum emodin</li> </ul>		
		<b>Date of version</b>	<b>7 September, 2020</b>

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

<b>1.2.1. Intended use:</b>	<b>1.2.2. Uses advised against:</b>
<ul style="list-style-type: none"> <li>• Research and development.</li> <li>• Laboratory reagent.</li> <li>• To be used by professionals only</li> </ul>	<ul style="list-style-type: none"> <li>• Not for drug,</li> <li>• Not to be used in humans or animals.</li> <li>• Not food additive</li> </ul>

**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:**

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)**

Acute Toxicity, Ingestion	Category 4	H303	May be harmful if swallowed
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## 2.2. GHS Label elements, including precautionary statements



### 2.2.1. Pictogram:

### 2.2.2. Signal word {WARNING}

### 2.2.3. GHS Hazard Statements

H303	May be harmful if swallowed	INGESTION cat 4 
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### 2.2.4. GHS Precautionary Statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash {hands} thoroughly after handling.
P284	Wear respiratory protection

### 2.2.5. GHS Response Phrases

P308+313	IF EXPOSED OR CONCERNED: Get medical advice/attention
P301 + P312+ P330	IF SWALLOWED: Call a POISON CENTER/doctor. If you feel unwell Rinse mouth.

## 3. Composition/information on ingredients

Substance	
Substance name:	Emodin
Concentration	100%
CAS Registry#:	518-82-1
EC#:	208-258-8
Molecular Formula:	C <sub>15</sub> H <sub>10</sub> O <sub>5</sub>
Molecular Weight:	270.20
Classification	Acute Tox. 4; H303 ; May be harmful if swallowed Eye irritant
Mixture?	Substance.

## 4. First Aid Measures

### 4.1. Description of First Aid Measures

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
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:	Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a physician.
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

Skin Contact:	No data available
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<b>Eye contact:</b>	No data available
<b>Ingestion:</b>	No data available
<b>Inhalation:</b>	No data available

#### 4.3. Indication of any immediate medical attention and special treatment needed

	No data available
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## 5. Fire-fighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	None known

### 5.2. Other information

<b>Hazardous combustion products</b>	Carbon oxides
<b>Advice for firefighters</b>	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

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

<b>Environmental precautions</b>	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

<b>Methods for containment:</b>	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.
<b>Methods for cleaning up:</b>	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

<b>Advice on safe handling:</b>	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

<b>Storage Conditions:</b>	Keep container tightly closed in a dry and well-ventilated place. Reportedly, Light sensitive. Store at -20 °C.
<b>Suitable packaging</b>	
<b>Incompatible materials:</b>	None known based on information available.



## 8. Exposure Controls/Personal Protection

### 8.1. Control parameters

<b>Control parameters</b>	Components with workplace control parameters
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### 8.2. Exposure controls

<b>Appropriate engineering controls</b>	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.
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### 8.3. Personal protective equipment

<b>[PPE=Personal Protection Equipment]</b>	
<b>PPE: Respiratory protection</b>	Where risk assessment shows air-purifying respirators are appropriate use a fullface 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).
<b>PPE: Hand Protection:</b>	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
<b>PPE: Eye Protection:</b>	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)
<b>PPE: Skin and Body Protection:</b>	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	White to yellowish powder
<b>No further safety relevant data are available</b>	

## 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.**

<b>11.1.1. Acute Toxicity</b>	No quantitative data available
Skin corrosion/irritation:	No data available
Serious eye damage/eye irritation:	No data available
Respiratory or skin sensitization/corrosion:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	Group 3: Not classified as human carcinogen
Reproductive toxicity / Teratogenicity:	No data available
STOT-SE – single exposure (GHS):	Respiratory tract irritation
STOT-SE – repeated exposure (GHS):	No data available
Aspiration hazard:	No data available

### 11.2. Additional information

RTECS number	CB7920600
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## 12. Ecological Information

<b>Eco-Toxicity</b>	No further relevant information available
<b>Other adverse effects</b>	No further relevant information available.

## 13. Disposal Considerations

### 13.1. Waste treatment methods

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

## 14. Transport information

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

	US DOT	US IATA	US IMDG	US ADR/RID
<b>UN Number</b>	Not hazardous goods	Not hazardous goods	Not hazardous goods	Not hazardous goods
<b>UN proper shipping name</b>	Not regulated ( <i>Emodin</i> )	Not regulated ( <i>Emodin</i> )	Not regulated ( <i>Emodin</i> )	Not regulated ( <i>Emodin</i> )
<b>Transport Hazard Class &amp; Packing Group</b>	Not hazardous goods Not regulated	Not hazardous goods Not regulated	Not hazardous goods Not regulated	Not hazardous goods Not regulated

### 14.2. Additional information

<b>Excepted quantities (EQ)</b>	Not applicable
<b>De Minimis exemption</b>	Not applicable

## 15. Regulatory information

### 15.1. Safety, health and environmental regulations/legislation

<b>USA EPA / TSCA</b>	This product is not listed on the USA EPA TSCA (it is for research)
<b>EU ECHA Status</b>	This product is registered with the EU ECHA, Number <b>208-258-8</b> ANNEX III: <b>Listed</b> REACH: <b>Preregistered</b>





## 16. *Other information*

### 16.1. *Date of revision:*

- Monday, 7 September, 2020 12:09

### 16.2. *General 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.

### 16.3. *The users'/employers' responsibility*

- All recommendations below are advisory in nature.
- A risk assessment should be performed by the employer/user prior to use of this product.
- All recommendations included in this document, are advisory in nature.
- The type of protective equipment must be selected based on the amount and concentration of all dangerous materials being used in the workplace.

### 16.4. *End of SDS*

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