



## Safety Data Sheet: Citrinin | Fermentek

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

Product identifiers	
Product name	Citrinin   Fermentek
Product Code	C
CAS #	518-75-2
EC/ REACH Number	208-257-2
Formula	C <sub>13</sub> H <sub>14</sub> O <sub>5</sub>

#### Intended uses of the substance or mixture and uses advised against

Intended use	Uses advised against:
<b>Only For Research and/or Development</b>	Not for drug, Not to be used in humans or animals. Not food additive

#### Details of the supplier of the safety data sheet

<b>FERMENTEK Ltd</b> 4 Yatziv street, POB 47120 Jerusalem 97800, Israel	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

#### 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

### 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

#### GHS Hazards Classification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)

Acute Toxicity, Oral	Category	3
Acute Toxicity, Inhalation	Category	3
Dermal Toxicity	Category	3
Skin irritation	Category	2
Serious Eye Damage	Category	1
Carcinogenicity	Category	2

#### EU Classification (According to EU Regulation 67/548/EEC)

Toxic by inhalation, in contact with skin and if swallowed. Irritating to the skin. Risk of serious damage to the eyes. Limited evidence of a carcinogenic effect.

GHS Label elements, including precautionary statements



Pictogram:

Signal word: **{DANGER}**



#### GHS Hazard Statements

H301	Toxic if swallowed.
H311	Toxic in contact with skin
H331	Toxic if inhaled.
H315	Causes skin irritation.
H318	Causes serious eye damage
H351	Suspected of causing cancer.

#### GHS Precautionary Statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301/P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P308/P313	IF exposed or concerned: Get medical advice/attention.
P305/P351/P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### Unclassified Hazards/Hazards Not Otherwise Classified

No data available

### 3) Composition/information on ingredients

#### Substance

Molecular Formula:	C <sub>13</sub> H <sub>14</sub> O <sub>5</sub>
Molecular Weight:	250.2
CAS Registry #:	518-75-2
EC#:	208-257-2
Synonyms	(3R,4S)-4,6-Dihydro-8-hydroxy-3,4,5-trimethyl-6-oxo-3H-2-benzopyran-7-carboxylic Acid; _(3R-trans)-4,6-Dihydro-8-hydroxy-3,4,5-trimethyl-6-oxo-3H-2-benzopyran-7-carboxylic Acid; Citrinin; NSC 186;

#### Mixture

Not mixture. This product is a pure compound

### 4) First Aid Measures

<b>General advice</b>	Consult a doctor, as medical attention may be required. If symptoms persist, call a physician.
<b>Eye contact:</b>	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. Rinse thoroughly with plenty of water for at least 15 minutes. Take victim immediately to hospital. Continue rinsing eyes during transport to hospital.
<b>Skin Contact:</b>	Remove contaminated clothing and shoes. 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.
<b>Ingestion:</b>	Do NOT induce vomiting. Call a physician or poison control center. Never give anything by mouth to an unconscious person. Clean mouth with water and drink afterwards plenty of water. Call a physician
<b>Inhalation:</b>	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



<b>Self-protection of the first aider:</b>	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.
<b>Most important symptoms:</b>	No information available.

## 5) Fire-fighting measures

### Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special hazards arising from the substance or mixture

Carbon oxides

### Advice for firefighters

Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit

### Further information

No data available

## 6) Accidental release measures

### Personal precautions

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

### 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

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

### 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, desiccated under inert gas.

#### Specific End Uses:

For scientific research and development only.  
To be used only by experienced professionals.  
Not for use in humans or animals.



## 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

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	Yellow crystals
Melting/freezing point	240-260°C

**No further safety-relevant information is available**

## 10) Stability and reactivity

Reactivity:	No information available.
Chemical stability:	Stable under normal conditions. <b>Exposure to air may cause deterioration.</b>
Conditions to avoid	Heat, flames and sparks
Incompatible materials	Strong oxidizers.
Possibility of Hazardous Reactions	None under normal processing
Hazardous decomposition products:	Carbon monoxide CO, Carbon dioxide (CO <sub>2</sub> ).



## 11) Toxicological information

### Information on toxicological effects

<b>Acute Toxicity</b>	LD50 (oral - Mouse) 105 mg/kg
<b>Skin corrosion/irritation:</b>	Moderate irritation.
<b>Serious eye damage/eye irritation:</b>	no data available
<b>Respiratory or skin sensitization:</b>	no data available
<b>Germ cell mutagenicity:</b>	no data available
<b>Carcinogenicity:</b>	Limited evidence of carcinogenicity. This compound has been designated by the IARC as Group 3-Not classifiable as to its carcinogenicity to humans.
<b>Reproductive toxicity / Teratogenicity:</b>	no data available
<b>STOT-SE – single exposure (GHS):</b>	no data available
<b>STOT-RE – repeated exposure (GHS):</b>	no data available
<b>Aspiration hazard:</b>	no data available

### Potential Health Effects

<b>Inhalation:</b>	Toxic if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	Toxic if absorbed through skin. Causes skin irritation.
<b>Eyes:</b>	Causes severe eye irritation.
<b>Ingestion</b>	Toxic if swallowed
<b>Signs and Symptoms of Exposure</b>	no data available
<b>Additional information:</b>	RTECS: DJ2275000

## 12) Ecological Information

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

## 13) 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

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

	US DOT	ADR/RID:	IMDG:	IATA
<b>UN Number</b> <b>UN proper shipping name</b>	UN 2811 - Toxic solid, organic, n.o.s. (Citrinin)	UN 2811 - Toxic solid, organic, n.o.s. (Citrinin)	UN 2811 - Toxic solid, organic, n.o.s. (Citrinin)	UN 2811 - Toxic solid, organic, n.o.s. (Citrinin)
<b>Hazard Class &amp; Packing Group</b>	Class 6.1 pg III	Class 6.1 pg III	Class 6.1 pg III	Class 6.1 pg III

## 15) Regulatory information

### Safety, health and environmental regulations/legislation

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



## 16) Other information

**Date of revision: 01 dec 2016**

### **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