



## Safety Data Sheet: Citreoviridin

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

Product identifiers			
Product name	<b>Citreoviridin</b>	Formula	<b>C<sub>23</sub>H<sub>30</sub>O<sub>6</sub></b>
Product Code	<b>CI</b>	RTECS	<b>UQ1235000</b>
CAS #	<b>25425-12-1</b>	MW	<b>402.48</b>
EC/ REACH Number	<b>636-737-5</b>		
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		Emergency Telephone number	
<b>FERMENTEK Ltd</b> 4 Yatziv street, POB 47120 Jerusalem 97800, Israel		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	
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			
<b>REACH</b>	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

#### 2.1. Classification of the substance

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### GHS Classification:

Acute toxicity - Oral Category 4 H302 Harmful if swallowed.

#### 2.2. GHS Label elements, including precautionary statements

Pictogram: Signal word **DANGER**

<b>GHS Hazard Statements</b>	Acute toxicity - Oral Category 2 Acute toxicity - Dermal Category 3 Acute toxicity - Inhalation (Dusts/Mists) Category 3 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Reproductive toxicity Category 2 Specific target organ toxicity (single exposure) Category 3
<b>GHS hazard Statements</b>	H300 - Fatal if swallowed H311 - Toxic in contact with skin H315 - Causes skin irritation H319 - Causes serious eye irritation H331 - Toxic if inhaled H335 - May cause respiratory irritation H361 - Suspected of damaging fertility or the unborn child

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**GHS Precautionary Statements**

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician  
**P305 + P351 + P338** - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing  
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P332 + P313 - If skin irritation occurs: Get medical advice/ attention  
P308 + P313 - IF exposed or concerned: Get medical advice/ attention  
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray  
P280 - Wear protective gloves/ eye protection/ face protection  
P361 - Remove/ Take off immediately all contaminated clothing  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P271 - Use only outdoors or in a well-ventilated area  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P330 - Rinse mouth  
P501 - Dispose of contents/ container to an approved waste disposal plant  
P405 - Store locked up  
P363 - Wash contaminated clothing before reuse

**Section 3. Composition/information on ingredients**

**Substance**

Molecular Formula:	C <sub>22</sub> H <sub>29</sub> N <sub>7</sub> O <sub>5</sub> ·2HCl; m.w. 544.43
CAS Registry #:	58-58-2
EC#:	200-387-8
Synonyms	Stylomycin, hydrochloride
Classification	Acute Tox. 4 (Oral), H302 - Harmful if swallowed

**Mixture**

Not mixture. This product is a pure compound

**Section 4. First Aid Measures**

<b>General advice</b>	Consult a physician if necessary. Remove to fresh air
<b>Skin Contact</b>	Wash skin with soap and water
<b>Eye contact:</b>	Flush with plenty of water
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. Clean mouth with water.
<b>Inhalation:</b>	Remove to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration
<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 and effects, both acute and delayed</b>	
<b>Most important symptoms</b>	No information available.
<b>Indication of any immediate medical attention and special treatment needed</b>	
<b>Note to physicians</b>	Treat symptomatically.

**Section 5. Fire-fighting measures**

**Extinguishing media**

<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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<b>Special hazards arising from the substance or mixture</b>	Carbon oxides, Nitrogen oxides, Phosgene
<b>Advice for firefighters</b>	Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit
<b>Further information</b>	No data available

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

### Environmental precautions

**Environmental precautions** See part 12

### 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:** Safety showers;  
Eyewash stations;  
Ventilation systems

**General Hygiene Considerations:** Handle in accordance with good industrial hygiene and safety practice.

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**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. 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 Tightly sealed goggles. 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 / chemical properties**

Physical state at room temperature	Solid / powder
Color	Off White
Melting/freezing point	180-195°C

*No further safety-relevant information is available*

**Section 10. Stability and reactivity**

Reactivity:	No information available.
Chemical stability:	Stable under normal conditions.
Conditions to avoid	Heat, flames and sparks
Incompatible materials	Strong reducers and oxidizers
Possibility of Hazardous Reactions	None under normal processing
Hazardous decomposition products:	Carbon monoxide CO, Carbon dioxide (CO <sub>2</sub> ). Nitrogen oxides (NO <sub>x</sub> ). Phosgene.

**Section 11. Toxicological information**

Information on likely routes of exposure	
Ingestion	Oral, Rodent (Mouse) LD50 = 720 mg/kg; Source: Antibiotics Annual. Vol. 2, Pg. 757, 1954/1955; RTECS AU7355000
Inhalation	No data available.
Eye contact.	Irritating effect.
Skin contact.	No data available.

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Information on toxicological effects	
Symptoms	Nutritional and Gross Metabolic - weight loss or decreased weight gain Lungs, Thorax, or Respiration - respiratory depression Gastrointestinal - hypermotility, diarrhea, nausea Behavioral - muscle weakness; somnolence (general depressed activity)
Chronic Toxicity	No information available
<b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>	Substance is not listed
<b>NTP (National Toxicology Program)</b>	Substance is not listed
<b>IARC (International Agency for Research on Cancer).</b>	Substance is not listed

## Section 12. Ecological Information

<b>Eco-Toxicity:</b>	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. Not classified as dangerous for the ozone layer.
<b>Other adverse effects</b>	No further relevant information available.

## Section 13. Disposal Considerations

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

## Section 14. Transport information

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

	US DOT	ADR/RID:	IMDG:	IATA
<b>UN Number</b>	N.A.	N.A.	N.A.	N.A.
<b>UN proper shipping name</b>	Not dangerous goods	Not dangerous goods	Not dangerous goods	Not dangerous goods
<b>Transport Hazard Class &amp; Packing Group</b>	None Not regulated	None Not regulated	None Not regulated	None Not regulated

## Section 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>USA EPA/ SARA</b>	S. 302 (EHS); S. 304 (RQ) – not listed
<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

### 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.

### SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No

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Reactive hazard

No

## Section 16. Other information

**Date of revision: 29-May 2017**

### 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.

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