# Material Safety Data Sheet (MSDS) for Patulin

## Section 1. Product and Company Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Patulin from Penicillium expansum</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS Number</td>
<td>149-29-1</td>
</tr>
<tr>
<td>Catalogue Code</td>
<td>PAT</td>
</tr>
</tbody>
</table>

**Company Identification**
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

## Section 2. Composition/Information on Ingredient

<table>
<thead>
<tr>
<th>EINECS:</th>
<th>205-735-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Formula:</td>
<td>C7H6O4</td>
</tr>
</tbody>
</table>

## Section 3. Hazards Identification

**Special indication of hazards**
Danger! May be fatal if inhaled, absorbed through skin or swallowed. May cause heritable genetic effects (based on in vitro data).

## Section 4. First Aid Measures

**Eye Contact**
Check for and remove contact lenses. Flush eyes with running water for at least 15 minutes separating eyelids. Seek medical attention immediately.

**Skin Contact**
Wash with soap and water for 15 minutes. Remove contaminated clothing and shoes. Seek medical attention immediately.

**Inhalation**
Remove from exposure. If breathing is difficult, administer oxygen. If breathing stops, administer artificial respiration. Seek medical attention immediately. Provide chemical label and MSDS if possible.

**Ingestion**
Remove dentures and clear mouth. If person is conscious, rinse mouth with water. Call physician or poison control immediately. Provide chemical label and MSDS information if possible.

## Section 5. Fire and Explosion Data

- **Combustion Products**: CO, CO2
- **Extinguishing Media**: Carbon Dioxide, Dry chemical powder, polymer foam, water spray
- **Special Firefighting Procedures**: Use self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- **Unusual Explosion Hazards**: None known

## Section 6 - Accidental Release Measures

**Clean-up Procedures**
Wearing appropriate protective gear as outlined under “Protective equipment” wipe up spill and place in sealed container and hold for disposal. Avoid raising dust. Ventilate the area and wash spill site after material has been removed

**Waste Disposal Method**
Observe all Federal, State and Local regulations concerning the disposal of this product.

## Section 7 - Handling and Storage
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Section 8 - Exposure Controls / Personal Protection

General
Use only in a chemical fume hood. Safety shower and eye bath. Use adequate ventilation to keep airborne concentrations low.

Protective equipment
Eye: Chemical safety goggles.

Section 9.

Appearance
Physical State: Solid, white, crystalline,

Solubility
DMSO, Ethanol, water

Melting point
109°C to 111°C

Section 10. Stability and Reactivity Data

Stability
This material is stable if stored as directed.

Conditions to Avoid
Excess heat, incompatible materials, oxidizers, light.

Incompatibles
Not Available

Hazardous polymerization
Will not occur

Section 11 - Toxicological Information

RTECS#: LV2625000

Toxicity data:
Dog, intravenous, LD50=10 mg/kg
Behavioral: Somnolence (General Depressed Activity) Behavioral: Food Intake (Animal)
Gastrointestinal: "Hypermotility, Diarrhea"
Food and Cosmetics Toxicology. Vol. 17, Pg. 605, 1979.

Mouse, oral, LD50=17 mg/kg
Lungs, Thorax, Or Respiration: Acute Pulmonary Edema Liver: Fatty Liver degeneration.

Rabbit, intravenous, LD50=12 mg/kg

Rat, intraperitoneal, LD50=4.59 mg/kg
Behavioral: Changes In Motor Activity (Specific Assay) Lungs, Thorax, Or Respiration: Dyspnea Gastrointestinal: Other Changes Annales Recherches Veterinaires. Vol. 8, Pg. 41, 1977

Rat, oral, LD50=27.79 mg/kg Behavioral: Changes In Motor Activity (Specific Assay) Lungs, Thorax, Or Respiration: Dyspnea Gastrointestinal: Other Changes Annales Recherches Veterinaires. Vol. 8, Pg. 41, 1977.

Section 12 - Ecological Data
### Material Safety Data Sheet (MSDS) for Patulin

**Eco-toxicological Information:** None Available

<table>
<thead>
<tr>
<th>Section 13 - Disposal Considerations</th>
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<tbody>
<tr>
<td><strong>Appropriate method of disposal of substance or preparation</strong></td>
</tr>
<tr>
<td>Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.</td>
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<tr>
<th>Section 14 - Transport Information</th>
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<tbody>
<tr>
<td><strong>UN/ID No</strong>&lt;br&gt;UN2811&lt;br&gt;Small quantities provision applies</td>
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</table>

| Section 15 - |
| Section 16 - Other Information |
| **Warranty**<br>For R&D use only. Not for drug, household or other uses. For use only by trained personnel. |

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to. The burden of safe use of this material rests entirely with the user. Fermentek shall not be held liable or any damage resulting from handling or from contact with the above product. It does not represent any guarantee of the properties of the product.

**Review:** MGur 27.11.2015