

Safety Data Sheet: Borrelidin

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

| Product identifiers | | | |
|---------------------|------------|-------------|-----------|
| Product name | Borrelidin | EC Number # | 811-923-0 |
| Product Code | BRL | Formula | C28H43NO6 |
| CAS # | 7184-60-3 | RTECS | 811-923-0 |

Intended uses of the substance or mixture and uses advised against

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

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

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

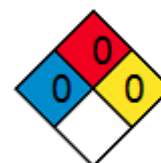
REACH

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.

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
This substance is not classified as dangerous according to Directive 67/548/EEC.



2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

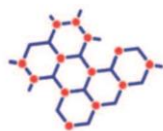
Section 3. Information on ingredients

Substance

Substance name: Borrelidin
CAS Registry #: 7184-60-3 EC#: **811-923-0**
Molecular Formula: C28H43NO6 Molecular Weight: 489,6

Mixture

Not mixture.



Section 4. First Aid Measures

4.1 Description of First Aid Measures

| | |
|-------------------------|--|
| If inhaled | If breathed in, move person into fresh air. If not breathing, give artificial respiration. |
| In case of skin contact | Wash off with soap and plenty of water. |
| In case of eye contact | Flush eyes with water as a precaution. |
| If swallowed | Never give anything by mouth to an unconscious person. Rinse mouth with water. |

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 5. Fire-fighting measures

Extinguishing media

| | |
|---------------------------------------|--|
| Suitable extinguishing media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable extinguishing media | None |
| Hazardous combustion products | Carbon oxides, |
| Advice for firefighters | Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit. |

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

Environmental precautions

| | |
|---------------------------|---|
| 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

| | |
|--------------------------|--|
| 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

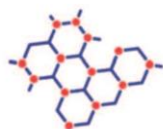
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|--------------------------|--|
| Advice on safe handling: | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, 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 General industrial hygiene practice
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.

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 |

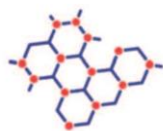
Section 9. Physical and chemical properties

Physical / chemical properties

| | |
|--|----------------|
| Physical State at room temperature | Solid / powder |
| Color | |
| Melting/freezing point | |
| 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. Sunlight. |
| Incompatible materials | Strong reducers and oxidizers |
| Possibility of Hazardous Reactions | None under normal processing |
| Hazardous decomposition products: | Carbon oxides, Nitrogen oxides |



Section 11. Toxicological information

Information on toxicological effects

The toxicological effects of this product have not been thoroughly studied.

| | |
|--|---|
| Acute Toxicity | LD50 (oral, swine) 400 mg/kg |
| Skin corrosion/irritation: | No data available |
| Serious eye damage/eye irritation: | No data available |
| Respiratory or skin sensitization: | No data available |
| Germ cell mutagenicity: | No data available |
| Carcinogenicity: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| Reproductive toxicity / Teratogenicity: | No data available |
| STOT-SE – single exposure (GHS): | No data available |
| STOT-RE – repeated exposure (GHS): | No data available |
| Aspiration hazard: | No data available |

Potential Health Effects

| | |
|---------------------------------------|--|
| Inhalation: | May be harmful if inhaled. May cause respiratory tract irritation |
| Skin | May be harmful if absorbed through skin. May cause skin irritation |
| Eyes: | May cause eye irritation |
| Ingestion | May be toxic if swallowed |
| Signs and Symptoms of Exposure | No information available. |
| Additional information: | RTECS: |

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12. Ecological Information

| | |
|------------------------------|--|
| Eco-Toxicity | No further relevant information available |
| Other adverse effects | No further relevant information available. |

Section 13. Disposal Considerations

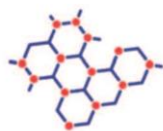
Waste treatment methods

| | |
|--|---|
| Waste from residues / unused products | Dispose of in accordance with local regulations |
| Contaminated packaging | 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 |
|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| UN Number | Not dangerous goods | Not dangerous goods | Not dangerous goods | Not dangerous goods |
| UN proper shipping name | | | | |
| Transport Hazard Class & Packing Group | Not regulated Not marine pollutant | Not regulated Not marine pollutant | Not regulated Not marine pollutant | Not regulated Not marine pollutant |



Section 15. Regulatory information

Safety, health and environmental regulations/legislation

| | |
|---------------------|---|
| USA EPA / TSCA | This product is not listed on the USA EPA TSCA |
| EU ECHA Status | This product is registered with the EU ECHA; EC 811-923-0 |
| CA: DSL/NDSL Status | This product is not listed on the Canadian DSL/NDSL |

Section 16. Other information

Date of revision: 11 July 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.

End of SDS