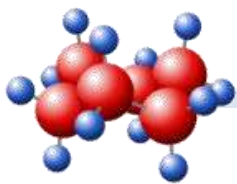
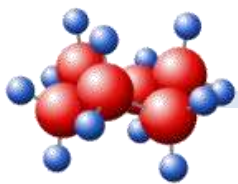


MSDS- Material Safety Data Sheet for: Borrelidin

<i>Section 1. Product and Company Information</i>	
Company identification	<p>Fermentek Ltd, Yatziv 4 st, Atarot industrial zone, Jerusalem Israel 97800. POB 47120</p> <p>Tel. +97225853953 Fax. +97225853943 Fermentek@fermentek.com http://fermentek.com</p>
Name	Borrelidin
CAS Number:	CAS 7184-60-3
Catalog Code:	BO
Synonyms	NSC 216128 Treponemycin
<i>Section 2. Composition/Information on Ingredient</i>	
EINECS/ELINCS	Not available
Chemical Formula:	C ₂₈ H ₄₃ NO ₆
Chemical Class:	Nitrile-containing macrolide antibiotic
RTECS	RTECS: ED8750000
TSCA	Not available
<i>Section 3. Hazards Identification</i>	
Emergency overview	RTECS substance category:
Hazard Description	<p>Acute Health Effects The toxicological properties of this compound have not been fully investigated. Exercise appropriate precautions to prevent opportunities for inhalation and to prevent direct contact with skin and eyes. All uncharacterized chemicals should be treated as toxins.</p> <p>Chronic Health Effects Unknown</p> <p>Potential health effects May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if swallowed. May be harmful if absorbed through skin. May cause skin irritation. May cause eye irritation</p>
HMIS RATING	HEALTH: 1; FLAMMABILITY: 0; REACTIVITY: 0
NFPA RATING	HEALTH: 1; FLAMMABILITY: 0; REACTIVITY: 0
<i>Section 4. First Aid Measures</i>	
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. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.



Aggravating conditions	Repeated or prolonged exposure is not known to aggravate medical condition.
Section 5. Fire and Explosion Data	
Flammability	May be combustible at high temperature.
Flash Point	Not Available
Combustion Products	CO, CO ₂ , nitric oxides
Extinguishing Media	Carbon Dioxide, Dry chemical powder, polymer foam, water spray
Fire-fighting	Use self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Fire \ Explosion Hazards	None known
Section 6 - Accidental Release Measures	
Cleanup 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. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete
Section 7 - Handling and Storage	
Protective Equipment	For spill clean-up, wear suitable protective clothing, chemical resistant rubber gloves, rubber boots, and chemical safety goggles. Self-contained breathing apparatus or NIOSH/MSHA approved respirator is recommended. Avoid contact with skin, eyes and clothing; material may be an irritant
Storage and Handling	This product should be kept in a tightly closed container. This product should be handled only by qualified experienced professionals. Wash thoroughly after handling this material Store at -18oC
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
Personal protective equipment	Respiratory: Government approved respirator. Hand: Compatible chemical-resistant gloves. Eye: Chemical safety goggles.
Section 9. Physical Data	
Appearance	White solid.
Molecular Weight	489.7
Melting	107°C -125°C
Solubility	Soluble in DMSO or methanol, DCM
Section 10. Stability and Reactivity Data	
Stability	This material is stable if stored as directed
Avoid	Avoid Excess heat, strong oxidizers
Incompatibles	NA
Hazardous polymerization	Will not occur
Section 11 - Toxicological Information	
RTECS #:	ED8750000
Carcinogenicity (by IARC)	Not known as probable, possible or confirmed human carcinogen
Toxicity data	Rat, Subcutaneous LD50 =1,78 mg/kg Rat, IV, LD50 =2 mg/kg Mouse, Subcutaneous LD50 =75 mg/kg source: Journal of Clinical Investigation. Vol. 28, Pg. 1047, 1949 Chicken, intramuscular LD50=74mg/kg ; source: American Soc. for Microbiology, 1978 Vol. 2, Pg. 1198, 1978.
Section 12 - Ecological Data	
Eco-toxicological Information: None available	



	Section 13 - Disposal Considerations
Appropriate method of disposal of substance or preparation	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.
	Section 14 - Transport Information
DOT	Small quantities exemption applies
IATA	this substance is considered to be non-hazardous for transport
	Section 15-Regulatory Information
EU additional classification	EU Risk And Safety phrases: S22: Do not breathe dust S24/25: Avoid contact with skin and eyes S36/37/39: Wear suitable protective clothing, gloves and eye/face protection R62: Possible risk of impaired fertility R63: Possible risk of harm to the unborn child R68: Possible risks of irreversible effects
	Section 16 -Other Information
Warranty	For R&D use only. Not for drug, household or other uses. For use only by trained personnel.
Disclaimer	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 appropriate safety precautions. It does not represent any guarantee of the properties of the product. 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.
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