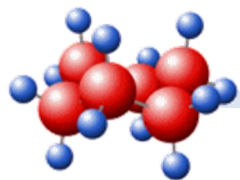
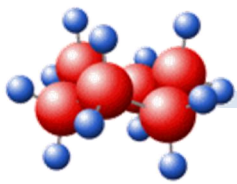


MSDS- Material Safety Data Sheet for: Verruculogen

<i>Section 1. Product and Company Information</i>		
Company Identification	Fermentek Ltd, Yatziv 4 st, Atarot industrial zone, Jerusalem Israel 97800. POB 47120	Tel. +97225853953 Fax.+97225853943 Fermentek@fermentek.com http://fermentek.com
Name:	Verruculogen	
CAS Number:	12771-72-1	
Catalog Code:	Verruculogen	
<i>Section 2. Composition/Information on Ingredient</i>		
EINECS/ELINCS	NA	
Chemical Formula:	C27H33N3O7	
Chemical Class:		
RTECS	JH4920000	
TSCA		
<i>Section 3. Hazards Identification</i>		
Danger	May be fatal if absorbed through skin or if swallowed. May cause damage to the following organs: nervous system.	
Emergency Overview	<ul style="list-style-type: none">• Highly Toxic (USA) Toxic (EU).• Toxic by inhalation, in contact with skin and if swallowed.• Target organ(s): Nerves.	
Hmis Rating	HEALTH: 3; FLAMMABILITY: 0; REACTIVITY: 0	
Nfpa Rating	HEALTH: 3; 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.	
<i>Section 5. Fire and Explosion Data</i>		
Flammability	Not Available	
Flash Point	Not Available	
Combustion products	CO, CO2, NO,NO2,	
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 Fire/Explosion	None known	



Hazards	
	<i>Section 6 - Accidental Release Measures</i>
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
	<i>Section 7 - Handling and Storage</i>
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.
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
	<i>Section 8 - Exposure Controls / Personal protection</i>
General	Use only in a chemical fume hood. Safety shower and eye bath. Use adequate ventilation to keep airborne concentrations low
Personal protective equipment	<ul style="list-style-type: none"> • Respiratory: Government approved respirator. • Hand: Compatible chemical-resistant gloves. • Eye: Chemical safety goggles.
	<i>Section 9. Physical Data</i>
Appearance	Off white powder
Molecular Weight	511.6
Melting	232'c
Solubility	DMSO, Ethanol, methanol
	<i>Section 10. Stability and Reactivity Data</i>
Stability	This material is stable if stored as directed
Conditions to Avoid	Excess heat, incompatible materials, strong oxidizers
Incompatibles	Reactive with oxidizing agents, acids, alkalis.
Hazardous polymerization	Will not occur
	<i>Section 11 - Toxicological Information</i>
RTECS#:	JH4920000
Multiple Routes	May be fatal if inhaled, swallowed, or absorbed through skin
Signs and symptoms of exposure	Reported to be a tremorgenic mycotoxin. Symptoms of exposure can include tremors, limb weakness, ataxia, and convulsions.
TOXICITY DATA	<ul style="list-style-type: none"> • Oral; Mouse; LD50=127 mg/kg LD50 • Intraperitoneal ; Mouse; LD50= 2400 UG/KG
	<i>Section 12 - Ecological Data</i>
Ecotoxicological Information:	None Available
	<i>Section 13 - Disposal Considerations</i>
Appropriate method of disposal of substance or	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



preparation	Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
Section 14 - Transport Information	
US DOT	<ul style="list-style-type: none"> • Proper Shipping Name: Toxic solid, organic, n.o.s. • IATA UN Number: 2811 • Hazard Class: 6.1 • Packing Group: II Small quantities exception
IATA	<ul style="list-style-type: none"> • Proper Shipping Name: Toxic solid, organic, n.o.s. • IATA UN Number: 2811 • Hazard Class: 6.1 • Packing Group: II Small quantities exception
Section 15-Regulatory Information	
European information	<ul style="list-style-type: none"> • Symbol of Danger: T • Indication of Danger: Toxic. • Risk Statements: R: 23/24/25 : Toxic by inhalation, in contact with skin and if swallowed. • Safety Statements: S: 36/37/39-45 : Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
United States Classification And Label Text	<ul style="list-style-type: none"> • Indication of Danger: Highly Toxic (USA) Toxic (EU). • Risk Statements: Toxic by inhalation, in contact with skin and if swallowed. • Safety Statements: Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). • US Statements: Target organ(s): Nerves.
United States Regulatory Information	SARA LISTED: No
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.