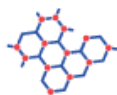


MSDS- Material Safety Data Sheet: Castanospermine

	<i>Section 1. Product and Company Information</i>
Company identification	<p>Fermentek ltd.</p> <p>4 Yatziv street, POB 47120 Jerusalem 97800, Israel Tel: +972 2 5853953 Fax: +972 2 5853943 eMail: fermentek@fermentek.com Website: www.fermentek.com</p>
Name:	Castanospermine from Castanospermum australe
CAS Number:	79831-76-8
Catalog Code:	CAS
Synonyms	1,6,7,8-Tetrahydroxyoctahydroindolizine
	<i>Section 2. Composition/Information on Ingredient</i>
Chemical Formula:	C ₈ H ₁₅ N ₄ O ₄
Chemical Class:	Alkaloid
RTECS	NM2408333
	<i>Section 3. Hazards Identification</i>
Emergency Overview	<p>May be harmful if ingested, inhaled, or absorbed through the skin. May cause eye or skin irritation. To the best of our knowledge, 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 suspected toxins.</p>
HMIS RATING	HEALTH: 0; FLAMMABILITY: 1; REACTIVITY: 0; Personal protection A
NFPA RATING	HEALTH: 0; FLAMMABILITY: 1; REACTIVITY: 0
	<i>Section 4. First Aid Measures</i>
Eye Contact	<p>Check for and remove contact lenses. Flush eyes with running water for at least 15 minutes separating eyelids. Seek medical attention immediately.</p>
Skin Contact	<p>Wash with soap and water for 15 minutes. Remove contaminated clothing and shoes. Seek medical attention immediately</p>
Inhalation	<p>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.</p>
Ingestion	<p>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.</p> <p>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.</p>
Aggravating conditions	<p>Repeated or prolonged exposure is not known to aggravate medical condition.</p>
	<i>Section 5. Fire and Explosion Data</i>
Flammability	<p>May be combustible at high temperature.</p>
Flash Point	Not Available
Combustion Products	CO, CO ₂ , nitric oxides
Extinguishing Media	Carbon Dioxide, Dry chemical powder, polymer foam, water spray
Special Fire fighting Procedures	<p>Use self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.</p>
Unusual Fire Hazards	None known
	<i>Section 6 - Accidental Release Measures</i>
Cleanup Procedures	<p>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</p>



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.
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 to off-white solid.
Molecular Weight	189.2
Melting	212-215 °C (decomposition)
Solubility	water
	Section 10. Stability and Reactivity Data
Stability	This material is stable if stored as directed
Conditions to Avoid	Excess heat, strong oxidizers
Incompatibles	NA
Hazardous polymerization	Will not occur
	Section 11 - Toxicological Information
RTECS#:	NM2408333
Toxicity data	Not available
	Section 12 - Ecological Data
	Eco-toxicological Information: not 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	NA
IATA	Not controlled under IATA.
	Section 15- regulatory Information
	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.