

## Safety Data Sheet


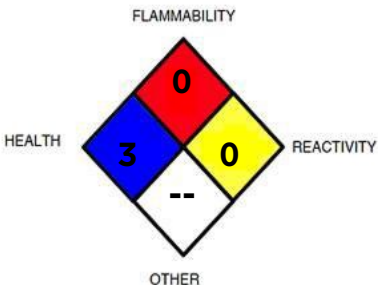
### Section 1: Product & Company Identification

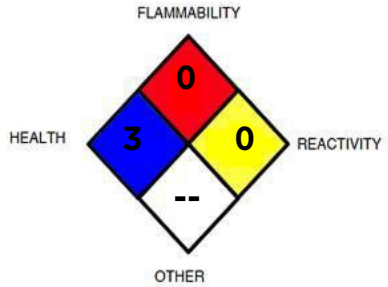
<b>Product Name:</b>	Castanospermine
<b>Product #:</b>	C-1501
<b>Synonyms:</b>	6,7-Diepicastanospermine; 6-Epicastanospermine; NSC 625381; 1,6,7,8-Tetrahydroxyoctahydroindolizine
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS #	EC #	% Composition
Castanospermine	79831-76-8	616-743-4	≥ 98

### Section 3: Hazards Identification

<b>Symbols</b>	
<b>HMIS Classification</b>	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>

<b>NFPA Classification</b>	
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## Section 4: First Aid Measures

<b>General Overview:</b>	Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
<b>Inhalation:</b>	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
<b>Skin:</b>	Generally the product does not irritate the skin.
<b>Eyes:</b>	Rinse opened eye for several minutes under running water.
<b>Ingestion:</b>	Immediately call a doctor.
	See section 11 for more detailed information on health effects & symptoms.

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	Product is not flammable.
<b>Extinguishing Media:</b>	Use fire fighting measures that suit the environment. A solid water stream may be inefficient.
<b>Hazardous thermal (de)composition products:</b>	No data available
<b>Special Fire Fighting Procedures:</b>	Mouth respiratory protective device.
<b>Flash Point:</b>	No data available

## Section 6: Accidental Release Measures

<b>Personal Precautions:</b>	Not required
<b>Environmental Precautions:</b>	Do not allow to enter sewers/surface or ground water.
<b>Methods for Clean-up:</b>	Ensure adequate ventilation.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Keep container tightly closed. Recommended storage temperature: -20°C
<b>Handling:</b>	Thorough dedusting. Ensure good ventilation/exhaustion at the workplace.

## SECTION 8: Exposure controls / Personal Protection

### Respiratory Protection:



In case of brief exposure or low pollution use a respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

### Skin and Body:



Protective gloves. The glove material must be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Protective lab coat.

### Eyes:



Not required

### Ventilation/Engineering Measures:

Ensure adequate ventilation.

### Hygiene:

Handle in accordance with good industrial hygiene and safety practice.

Other:	N/A
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## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	Solid, characteristic odor
<b>Formula</b>	C <sub>8</sub> H <sub>15</sub> NO <sub>4</sub>
<b>Molecular Wt.</b>	189.2
<b>Melting Pt.</b>	No data available
<b>Boiling Pt.</b>	No data available
<b>Density:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	DMSO [10 mg/mL], PBS (pH 7.2) [10 mg/mL]
<b>Flash Point:</b>	No data available
<b>Autoignition Temp:</b>	No data available

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous decomposition products:</b>	Carbon oxides, nitrogen oxides
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Conditions to avoid:</b>	No data available

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	NM2408333
<b>ACUTE Toxicity:</b>	No data available
<b>CHRONIC Toxicity:</b>	No data available
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	<p>IARC: 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.</p> <p>AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH.</p> <p>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP.</p> <p>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA.</p>

	EPA: No classification on carcinogenic data is available from EPA
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## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	Water Hazard Class 1 (Self-Assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course, or sewage system.
<b>Mobility:</b>	No data available
<b>Persistence and degradability:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available
<b>Corrosivity Characteristic:</b>	No data available
<b>General Notes:</b>	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
<b>Contaminated Packaging:</b>	Disposal must be made according to official regulations.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	N/A
<b>ADR / RID (LAND):</b>	Not regulated
<b>DOT regulations:</b>	Not regulated
<b>IMDG/IMO (SEA):</b>	Not regulated
<b>IATA/DGR (AIR):</b>	Not regulated
<b>Special Provisions:</b>	N/A

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	Warning! H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
<b>Risk Phrases:</b>	P261 Avoid breathing dust/fume/gas/mist/vapors/spray P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves / protective clothing.
<b>Safety Phrases:</b>	P301+P312 If swallowed: Call a poison center/doctor if you feel unwell. P302+P352 If on skin: Wash with plenty of water.

	<p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P321 Specific treatment (see on this label).</p> <p>P330 Rinse mouth.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P501 Dispose of contents/container in accordance with local/regional/national/international regulations.</p>
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	<p>TSCA: Not listed</p> <p>California Proposition 65: No products were found</p>
<b>U.S. Federal Regulations:</b>	<p>SARA 302/304 emergency planning and notification: No products were found.</p> <p>SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found.</p> <p>SARA 313 toxic chemicals notification and release reporting: No products were found.</p> <p>Clean Water Act (CWA) 307: No products were found.</p> <p>Clean Water Act (CWA) 311: No products were found.</p> <p>Clean Air Act (CAA) 112 accidental release prevention: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated flammable substances: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated toxic substances: No products were found.</p> <p>OSHA/GHS: Acute Toxicity - Oral (Cat. 4), Acute Toxicity - Dermal (Cat. 4), Acute Toxicity - Inhalation (Cat. 4)</p>
<b>WHMIS (Canada):</b>	N/A

## SECTION 16: Other Information

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*