
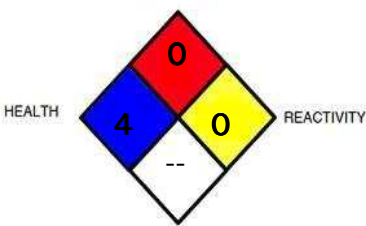
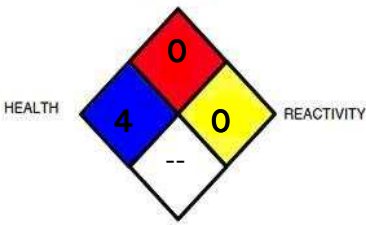




MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification	
Product Name:	Cytochalasin E, from <i>Aspergillus clavatus</i>
Product #:	C-1197
Synonyms:	(21,23-Dioxa[13]cytochalasa-13,19-diene-1,17,22-trione, 6,7-epoxy-18-hydroxy-16,18-dimethyl-10-phenyl-, (7S,13E,16S,18R,19E)-)
Supplier:	A.G. Scientific, Inc. 6450 Lusk Blvd E102 San Diego CA 92121 Tele# + 858-452-9925 Fax# + 858-452-9926
Emergency Tele#:	Chemtrec, Tele# in USA 1-800-424-9300, International 1-703-527-3887

Section 2: Composition / Information on Ingredients					
Component	CAS#	EC #	%	Classification	R Phrases
	36011-19-5	252-835-7			R26/27/28, R40

Section 3: Hazards Identification	
Symbols	 6 Toxic
HMIS Classification	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>
NFPA Classification	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>

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Section 4: First Aid Measures

General Overview:	Avoid contact, wear suitable protective clothing, gloves and eye/face protection.
Inhalation:	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration, seek medical attention.
Skin:	Wash immediately with water for 15 minutes. Remove contaminated clothing. Wash contaminated clothing before reuse. Seek medical attention if symptoms appear.
Eyes:	In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes. Remove contacts. Assure adequate flushing of the eyes by separating the eyelids with fingers.
Ingestion:	If swallowed, wash out mouth with water provided person is conscious. DO NOT induce vomiting. Seek medical attention if symptoms appear. Loosen tight clothing like collar, tie, belt or waistband.
	<i>See section 11 for more detailed information on health effects & symptoms</i>

SECTION 5: Fire Fighting Measures

Flammability of the product:	N/A
Extinguishing Media:	Dry Chemical Powder for SMALL FIRES and carbon dioxide or water spray, fog or foam for LARGE FIRES. Do not use water jet.
Hazardous thermal (de)composition products:	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂)
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus (SCBA) and protective clothing to prevent contact with skin and eyes. Be sure to use an approved/certified respirator or equivalent.
Flash Point:	N/A

Section 6: Accidental Release Measures

Personal Precautions:	Use Personal Protection Equipment. Splash goggles. Full suit. Boots. Gloves. Avoid dust formation.
Environmental Precautions:	Do not let product enter drains.
Methods for Clean-up:	Sweep up & shovel into suitable disposal container. Ventilate area and wash spill site after material pickup is complete.

SECTION 7: Handling & Storage

Storage:	-20°C. Keep container tightly closed and in a well ventilated area. Do not store above -20°C.
Handling:	Use only in area provided with appropriate exhaust ventilation. Keep away from heat and

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source of ignition. Empty containers pose a fire risk, evaporate residue under fume hood. Ground all equipment containing material. Do not breathe dust.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:



Wear appropriate government (NIOSH/MSHA) approved respirator. Do not breathe vapor.

Skin and Body:



Chemical-resistant gloves and lab coat/other protective clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

Eyes:



Safety goggles.

Ventilation/Engineering Measures:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Hygiene:

Wash hands after handling compound and before eating, smoking, using lavatory and at the end of the day.

Other:

Contains no substances with occupational exposure limit values.

SECTION 9: Physical and Chemical Properties

Appearance & Odor:	Powder
Color:	White to off-white
Formula:	C ₂₈ H ₃₃ NO ₇
Molecular Wt.	495.57 g/mole

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Melting Pt.	N/A
Boiling Pt.	N/A
Density:	N/A
Vapor Pressure:	N/A
Evaporation Rate:	N/A
Vapor Density:	N/A
Water Solubility:	N/A
Flash Point:	N/A
Autoignition Temp:	N/A

SECTION 10: Stability and Reactivity

Stability:	Stable if stored as directed.
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions.
Materials to Avoid:	Strong oxidizing agents, strong acids, alkalis
Conditions to avoid:	Excess heat, incompatible materials, strong oxidizers

SECTION 11: Toxicological Information

RTECS#:	HA5360000
ACUTE Toxicity:	TOXIC LD ₅₀ : 91 mg/kg (rat, oral)
CHRONIC Toxicity:	Developmental Toxicity - mouse - Intraperitoneal Effects on Embryo or Fetus: Fetal death. Developmental Toxicity - mouse - Intraperitoneal Effects on Embryo or Fetus: Fetal death. Specific Developmental Abnormalities: Craniofacial (including nose and tongue). Developmental Toxicity - mouse - Intraperitoneal Specific Developmental Abnormalities: Central nervous system. Possible risk of congenital malformation in the fetus. Suspected human reproductive toxicant
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	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. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH. 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. 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. EPA: No classification on carcinogenic data is available from EPA

SECTION 12: Ecological Information

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Ecotoxicity:	N/A
Mobility:	N/A
Persistence and degradability:	N/A
Bioaccumulative potential:	N/A
Other adverse effects:	N/A
Corrosivity Characteristic:	N/A
General Notes:	Do not allow undiluted product or large quantities of it to reach groundwater, water course or sewer system. Do not allow materials to be released into the environment without proper government permits.

SECTION 13: Disposal Considerations

Residue Waste or Unused product:	<i>Only professional staff trained in such techniques must undertake waste disposal. Observe all appropriate federal, provincial or state and local regulations.</i>
Contaminated Packaging:	Do not re-use empty containers. Dispose of as unused product.

SECTION 14: Transportation Information



UN ID#:	UN1544
ADR / RID (LAND):	<div style="text-align: center;"></div> <p>Proper shipping name: UN1544 Hazard Class: 6.1 Packaging Group: III Proper shipping name: Alkaloids, solid, n.o.s. (21,23-Dioxa[13]cytochalasa-13,19-diene 1,17,22-trione, 6,7-epoxy-18-hydroxy-16,18-dimethyl-10-phenyl-, (7S,13E,16S,18R,19E)-) Label: 6</p>
DOT regulations:	<div style="text-align: center;"></div> <p>Hazard Class: 6.1 Identification number: UN1544 Packaging Group: III Proper shipping name: Alkaloids, solid, n.o.s. (21,23-Dioxa[13]cytochalasa-13,19-diene 1,17,22-trione, 6,7-epoxy-18-hydroxy-16,18-dimethyl-10-phenyl-, (7S,13E,16S,18R,19E)-)</p>

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Label:	6
IMDG/IMO (SEA):	
Hazard Class:	6.1
Identification number:	UN1544
Packaging Group:	III
Proper shipping name:	Alkaloids, solid, n.o.s. (21,23-Dioxa[13]cytochalasa-13,19-diene 1,17,22-trione, 6,7-epoxy-18-hydroxy-16,18-dimethyl-10-phenyl-, (7S,13E,16S,18R,19E)-)
Label:	6
Marine Pollutant:	No
IATA/DGR (AIR):	
IATA Class:	6.1
UN/ID Number:	UN1544
Label:	6
Packaging Group:	III
Proper shipping name:	Alkaloids, solid, n.o.s. (21,23-Dioxa[13]cytochalasa-13,19-diene 1,17,22-trione, 6,7-epoxy-18-hydroxy-16,18-dimethyl-10-phenyl-, (7S,13E,16S,18R,19E)-)
Label:	6
Special Provisions:	N/A

SECTION 15: Regulatory Information

EU Regulations:	T+ Very Toxic
SYMBOLS:	
Risk Phrases:	R 26/27/28: Very Toxic by inhalation, in contact with skin and if swallowed. R40: Limited evidence of a carcinogenic effect.
Safety Phrases:	S1: Keep locked up. S37: Wear suitable protective gloves. S45: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible). S28A: After contact with skin, wash immediately with plenty of water.
CAS#	CAS# [30827-99-7]
EC#	252-835-7
US Regulations:	Pennsylvania Right To Know Components: 21,23-Dioxa[13]cytochalasa-13,19-diene-1,17,22-trione, 6,7-epoxy-18-hydroxy-16,18-dimethyl-10-phenyl-, (7S,13E,16S,18R,19E)- CAS-No. 36011-19-5 New Jersey Right To Know Components: 21,23-Dioxa[13]cytochalasa-13,19-diene-1,17,22-trione, 6,7-epoxy-18-hydroxy-16,18-dimethyl-10-phenyl-, (7S,13E,16S,18R,19E)- CAS-No. 36011-19-5

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HCS Classification:	Not controlled under the HCS (United States).
U.S. Federal Regulations:	<p>OSHA Hazards: Highly toxic by inhalation, Highly toxic by ingestion, Highly toxic by skin absorption, Teratogen.</p> <p>TSCA: No products were found.</p> <p>SARA 302/304/311/312 extremely hazardous substances: No products were found</p> <p>SARA 302/304 emergency planning and notification: No products were found.</p> <p>SARA 302/304/311/312 hazardous chemicals: No products were found.</p> <p>SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Acute Health Hazard, Chronic Health Hazard</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>
WHMIS (Canada):	<p>Not controlled under the WHMIS (Canada)</p> <p>No products were found.</p>

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. A.G. Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. A.G. Scientific products are for research purposes only. Not for human use or consumption.*