

Cytochalasin

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SIGMA-ALDRICH

Material Safety Data Sheet

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Section 1 - Product and Company Information

Product Name Cytochalasin D, From Zygosporium mansonii
Product Number C8273
Brand Sigma Chemical

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
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Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
CYTOCHALASIN D	22144-77-0	No	244-804-1	

Formula C30H37NO6
Synonyms Cytochalasin D, Zygosporin A

Section 3 - Hazards Identification

Emergency Overview

Highly Toxic (USA) Toxic (EU).
Toxic if swallowed. Possible risk of harm to the unborn child.

HMIS Rating
Health: 3* Flammability: 0 Reactivity: 0

NFPA Rating
Health: 3 Flammability: 0 Reactivity: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

Extinguishing Media

Suitable

Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting

Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill

Evacuate area.

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up

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

Handling

User Exposure

Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

Storage

Suitable

Keep tightly closed. Store at -20°C

Section 8 - Exposure Controls / PPE

Engineering Controls

Safety shower and eye bath. Use only in a chemical fume hood.

Personal Protective Equipment

Respiratory

Government approved respirator.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles.

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General Hygiene Measures

Wash contaminated clothing before reuse. Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties**Appearance****Physical State**

Solid

Molecular Weight: 507.63 AMU

pH N/A
BP/BP Range N/A
MP/MP Range 260 - 267 °C
Freezing Point N/A
Vapor Pressure N/A
Vapor Density N/A
Saturated Vapor Conc. N/A
SG/Density N/A
Bulk Density N/A
Odor Threshold N/A
Volatile% N/A
VOC Content N/A
Water Content N/A
Solvent Content N/A
Evaporation Rate N/A
Viscosity N/A
Partition Coefficient N/A
Decomposition Temp. N/A
Flash Point °F N/A
Flash Point °C N/A
Explosion Limits N/A

Flammability N/A
Autoignition Temp N/A
Solubility N/A

N/A = not available

Section 10 - Stability and Reactivity**Stability**

Stable

Stable.

Materials to Avoid

Strong oxidizing agents, Strong acids, Strong bases.

Hazardous Decomposition Products**Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Hazardous Polymerization**Hazardous Polymerization**

Will not occur.

Section 11 - Toxicological Information**Route of Exposure****Skin Contact**

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through the skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled.

Ingestion

Toxic if swallowed.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: GZ4850000

Toxicity Data

Intraperitoneal - Rat: 900 UG/KG (LD50)

Oral - Mouse: 36 mg/kg (LD50)

Intraperitoneal - Mouse: 2 MG/KG (LD50)

Remarks: Peripheral Nerve and Sensation: Spastic paralysis with or without sensory change.
Behavioral: Excitement.

Subcutaneous - Mouse: 1850 UG/KG (LD50)

Chronic Exposure - Teratogen

Species	Dose	Route of Application	Exposure Time
Result: Possible risk of congenital malformation in the fetus.			
Rat	2 GM/KG	Intraperitoneal	(7-11D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).			
Mouse	1500 UG/KG	Oral	(8D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system.			
Mouse	2100 UG/KG	Intraperitoneal	(7-9D PREG)
Result: Effects on Embryo or Fetus: Fetal death.			
Mouse	900 UG/KG	Intraperitoneal	(7-9D PREG)
Result: Specific Developmental Abnormalities: Central nervous system.			
Mouse	4100 UG/KG	Intraperitoneal	(7-11D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system.			
Mouse	4700 UG/KG	Intraperitoneal	(7-11D PREG)
Result: Specific Developmental Abnormalities: Craniofacial (including nose and tongue).			
Hamster	1 MG/KG	Intraperitoneal	(8D PREG)
Result: Effects on Embryo or Fetus: Fetal death.			
Specific Developmental Abnormalities: Central nervous system.			

Chronic Exposure - Mutagen

Species	Dose	Cell Type	Mutation test
Human	1 MG/L	leukocyte	Morphological transformation.
Human	1 MG/L	HeLa cell	Cytogenetic analysis
Human	1 MG/L	Other cell types	Cytogenetic analysis
Mouse	600 UG/KG	Intraperitoneal	Cytogenetic analysis

Chronic Exposure - Reproductive Hazard

<u>Species</u>	<u>Dose</u>	<u>Route of Application</u>	<u>Exposure Time</u>
Mouse	1500 UG/KG	Oral	(8D PREG)

Result: Effects on Fertility: Post-Implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
Effects on Embryo or Fetus: Fetal death, Specific Developmental Abnormalities: Central nervous system.

Section 12 - Ecological Information

No data 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.

Section 14 - Transport Information**DOT**

Proper Shipping Name: Alkaloids, solid, n.o.s. [or] Alkaloid salts, solid, n.o.s. [poisonous]
UN#: 1544
Class: 6.1
Packing Group: Packing Group II
Hazard Label: Toxic substances.
PIH: Not PIH

IATA

Proper Shipping Name: Alkaloids, solid, n.o.s.
IATA UN Number: 1544
Hazard Class: 6.1
Packing Group: II

Section 15 - Regulatory Information**EU Additional Classification**

Symbol of Danger: T

Indication of Danger

Toxic.

Risk Statements R: 25 63

Toxic if swallowed. Possible risk of harm to the unborn child.

Safety Statements S: 36/37 45

Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Classification and Label Text

Indication of Danger

Highly Toxic (USA) Toxic (EU).

Risk Statements

Toxic if swallowed. Possible risk of harm to the unborn child.

Safety Statements

Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

United States Regulatory Information

SARA Listed: No

Canada Regulatory Information**WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No
NDL: No

Section 16 - Other Information**Disclaimer**

For R&D use only. Not for drug, household or other uses.

Warranty

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. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

