

Revision: 01/25/2013

Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108



 Identification of the second se	ne Substance/Mixture and of the Company/Undertaking				
Product Code:	11328				
Product Name:	Cytochalasin B				
Synonyms:	(3E,5R,9R,11E,12aS,13S,15S,15aS,16S,18aS)-6,7,8,9,10,12a,13,14,15,15a,16,17- dodecahydro-5,13-dihydroxy-9,15-dimethyl-14-methylene-2H-oxacyclotetradecino[2,3-d] isoindole-2,18(5H)-dione; NSC 107658; Phomin;				
Intended Use:	For research use only, not for human or veterinary use.				
Manufacturer Information					
Company Name:	Cayman Chemical Company				
Emergency Contact:	CHEMTREC Within USA and Canada: +1 (800)424-9300				
Alternate Emergency Contact:	CHEMTREC Outside USA and Canada: +1 (703)527-3887				
Information:	Cayman Chemical Company +1 (734)971-3335				
Web site address:	www.caymanchem.com				

GHS Classification	Placard	Key word	GHS Hazard		
Acute Toxicity: Oral, Category 2	Skull and crossbones	Danger	Fatal if swallowed		
Acute Toxicity: Skin, Category 2	Skull and crossbones	Danger	Fatal in contact with skin		
Acute Toxicity: Inhalation, Category 1	Skull and crossbones	Danger	Fatal if inhaled		
Toxic To Reproduction, Category 2	Health hazard	Warning	Suspected of damaging fertility or the unborn child		
GHS Hazard Phrases:	H300: Fatal if sw H310: Fatal in co H330: Fatal if inh H361: Suspected	ntact with skin naled.	tility or the unborn child.		
GHS Precaution Phrases:	 H361: Suspected of damaging fertility or the unborn child. P264: Wash hands thoroughly after handling. P262: Do not get in eyes, on skin, or on clothing. P280: Wear protective gloves/clothing and eye/face protection as specified by the manufacturer/supplier or the competent authority. P260: Do not breathe dust/fume/gas/mist/vapours/spray. P284: Wear respiratory protection. as specified by the manufacturer/supplier or the competent authority. P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P281: Use personal protective equipment as required. 				
GHS Response Phrases:	P330: Rinse mou P361: Remove/Ta P302+350: IF ON P310: Immediate P363: Wash cont P304+340: IF IN for breathing.	th. ake off immediat V SKIN: Gently v ly call a POISON aminated clothin; HALED: Remov	nmediately call a POISON CENTER or doctor/physician. ely all contaminated clothing. wash with plenty of soap and water. V CENTER or doctor/physician. g before reuse. e victim to fresh air and keep at rest in a position comfortable ed: Get medical attention/advice.		



GHS Storage and Disposal Phrases:	Please refer to Section 7 for Storage and Section 13 for Disposal information.							
Route(s) of Entry:	Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection							
Potential Health Effects (Acute and Chronic):	May be fatal if swallowed, inhaled, or absorbed through skin.							
	Material may be irritating to the mucous membranes and upper respiratory tract.							
	May cause eye, skin, or respiratory system irritation.							
	Suspected of damaging fertility or the unborn child.							
Target Organs:	Liver.							
Signs and Symptoms Of Exposure:	To the best of our	knowledge, th	e toxicologica	l properties have r	not been thoroughly investigated.			
Medical Conditions Constally Agaroyated By	N. 1.4. 11.1.1							

Medical Conditions Generally Aggravated By No data available.

Exposure:

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	Risk Phrases	RTECS #	
. Cytochalasin B	14930-96-2	100.0 %	239-000-2	R26/27/28-63	RO0205000	
	4. First	Aid Measu	ires			
Emergency and First Aid Procedures:						
In Case of Inhalation:		air. If not breathing mediate medical at		piration or give oxygen	by trained	
In Case of Skin Contact:	-	-		or at least 20 minutes. R ms occur. Wash clothin		
In Case of Eye Contact:		t and flush eyes wi ted by medical pers		for at least 20 minutes. H	Have eyes	
In Case of Ingestion:	Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.					
Indication of any immediate medical attention and special treatment needed:	No data available					
	5. Fire Fi	ghting Mea	sures			
Suitable Extinguishing Media:	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.					
Unsuitable Extinguishing Media:	A solid water stre	A solid water stream may be inefficient.				
Flammable Properties and Hazards:	No data available	No data available.				
Flash Pt:	No data.					
Autoignition Pt:	No data available					
Explosive Limits:	LEL: No data.		UEL: No data.			
Hazardous Combustion Products:	carbon dioxide carbon monoxide					
Fire Fighting Instructions:	As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.					
6	. Accidenta	I Release N	leasures			
Protective Precautions, Protective Equipment and Emergency Procedures:	As conditions wa		H approved self-co	ventilation. Intained breathing appar Ty goggles, and heavy ru	-	
Environmental Precautions:	Take steps to avo	id release into the e	nvironment, if safe	e to do so.		



Steps To Be Taken In Case Material Is Released Or Spilled:	Contain spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local regulations.							
7. Handling and Storage								
Precautions To Be Taken in Handling:								
	Avoid prolonged	or repeated exposure.						
Precautions To Be Taken in Storing:	Keep container tig							
	Store in accordan	ce with information listed on th	ne product insert.					
Hazard Label Information:	Avoid contact wit	-	the this container. Use with adec	quate ventilation				
	Wash thoroughly	after handling.						
8. Ex	posure Con	trols/Personal Pro	tection					
Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits				
1. Cytochalasin B	14930-96-2	No data.	No data.	No data.				
Hazardous Components (Chemical Name)	CAS #	Britain EH40	France VL	Europe				
1. Cytochalasin B	14930-96-2		No data.	No data.				
Protective Equipment Summary - Hazard								
Label Information:	glasses Safety	shower in work area Vent He	bod					
Engineering Controls (Ventilation etc.)	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborn							
Engineering Controls (Ventilation etc.):	Use process encid		levels below recommended exposure limits.					
Engineering Controls (Ventilation etc.):	-							
Eye Protection:	-							
	levels below reco Safety glasses							
Eye Protection:	levels below reco Safety glasses	mmended exposure limits.						
Eye Protection: Protective Gloves:	levels below reco Safety glasses Compatible chem Lab coat	mmended exposure limits.	nt.					
Eye Protection: Protective Gloves: Other Protective Clothing:	levels below reco Safety glasses Compatible chem Lab coat	mmended exposure limits. nical-resistant gloves respirator, as conditions warra	nt.					
Eye Protection: Protective Gloves: Other Protective Clothing: Respiratory Equipment (Specify Type):	levels below reco Safety glasses Compatible chem Lab coat NIOSH approved Do not take interr	mmended exposure limits. nical-resistant gloves respirator, as conditions warra nally.	nt. I be equipped with an eyewash ar					
Eye Protection: Protective Gloves: Other Protective Clothing: Respiratory Equipment (Specify Type):	levels below reco Safety glasses Compatible chem Lab coat NIOSH approved Do not take interr	mmended exposure limits. nical-resistant gloves respirator, as conditions warra nally.						
Eye Protection: Protective Gloves: Other Protective Clothing: Respiratory Equipment (Specify Type):	levels below reco Safety glasses Compatible chem Lab coat NIOSH approved Do not take interr Facilities storing	mmended exposure limits. nical-resistant gloves respirator, as conditions warra nally. or utilizing this material should						

9. Physical and Chemical Properties

Information on Basic Physical and Chemica	al Properties
Physical States:	[] Gas [] Liquid [X] Solid
Appearance and Odor:	A crystalline solid
Melting Point:	No data.
Boiling Point:	No data.
Flash Pt:	No data.
Evaporation Rate:	No data.
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Specific Gravity (Water = 1):	No data.
Solubility in Water:	No data.
Solubility Notes:	~0.05 mg/ml in 1:20 DMF:PBS (pH 7.2); ~20 mg/ml in EtOH & DMSO; ~30 mg/ml in DMF;
Autoignition Pt:	No data.
Explosive Properties:	No data available.
Oxidizing Properties:	No data available.



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Other Information							
Percent Volatile:	No data.						
Formula:	C29H37NO5						
Molecular Weight:	479.60						
	10. Stabil	ity and Re	activity				
Reactivity:	No data available		y				
Stability:	Unstable []	Stable [X]					
Stability Note(s):	Stable if stored in accordance with information listed on the product insert.						
Conditions To Avoid:	No data available	e.					
Polymerization:	Will occur []	Will not occur	[X]				
Incompatibility - Materials To Avoid:	acids alkalis strong oxidizing	agents					
Hazardous Decomposition Or Byproducts:	strong oxidizing agents carbon dioxide carbon monoxide nitrogen oxides						
	11. Toxico	logical Info	ormation				
Toxicological Information:	The toxicological	l effects of this pr	oduct have not bee	n thoroughly studied.			
Chronic Toxicological Effects:	-	-	mutagen and repro	ductive effector. Ibstances (RTECS) da	ta is presented her		
	See actual entry i Cytochalasin B R	in RTECS for con	nplete information				
lazardous Components (Chemical Name)	-	in RTECS for con	nplete information	ACGIH	OSHA		
	Cytochalasin B R CAS # 14930-96-2	IN RTECS for con RTECS Number: I NTP n.a.	nplete information RO0205000 IARC n.a.		OSHA n.a.		
	Cytochalasin B R CAS # 14930-96-2	IN RTECS for con RTECS Number: I	nplete information RO0205000 IARC n.a.	ACGIH			
Hazardous Components (Chemical Name) I. Cytochalasin B General Ecological Information:	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int	IN RTECS for con RTECS Number: I NTP n.a. Ogical Infor o the environmen	nplete information RO0205000 IARC n.a. mation	ACGIH n.a.			
I. Cytochalasin B	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire	IN RTECS for con RTECS Number: I NTP n.a. Ogical Infor o the environmen	ADDETED INFORMATION ROO205000 IARC n.a. mation t. n water may cause	ACGIH n.a.			
Cytochalasin B General Ecological Information:	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire 13. Dispos	In RTECS for con RTECS Number: I NTP n.a. Ogical Infor o the environmen control or dilution Sal Conside	ADDETED INFORMATION ROO205000 IARC n.a. mation t. n water may cause	ACGIH n.a. pollution.			
Cytochalasin B General Ecological Information:	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire 13. Dispose Dispose in accord	In RTECS for con RTECS Number: I NTP n.a. Ogical Infor o the environmen control or dilution sal Conside dance with local, s	nplete information RO0205000 IARC n.a. mation t. n water may cause erations state, and federal r	ACGIH n.a. pollution.			
Cytochalasin B	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire 13. Dispose Dispose in accord 14. Trans	In RTECS for con RTECS Number: I NTP n.a. Ogical Infor o the environmen control or dilution Sal Conside	nplete information RO0205000 IARC n.a. mation t. n water may cause erations state, and federal r	ACGIH n.a. pollution.			
General Ecological Information:	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire 13. Dispose Dispose in accord 14. Trans on and Labelling Fatal if swallowed Fatal in contact with s nger! Fatal if inhaled	In RTECS for com RTECS Number: I NTP n.a. DGical Infor o the environmen control or dilution Sal Conside dance with local, a sport Inforn kin	IARC IARC I.a. mation t. n water may cause erations state, and federal r mation	ACGIH n.a. pollution.			
Cytochalasin B General Ecological Information: Waste Disposal Method: Globally Harmonized System of Classificatio Acute Toxicity: Oral, Category 2 - Danger! Acute Toxicity: Skin, Category 2 - Danger! Acute Toxicity: Inhalation, Category 1 - Da Toxic To Reproduction, Category 2 - Warn	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire 13. Dispose Dispose in accord 14. Trans on and Labelling Fatal if swallowed Fatal in contact with s inger! Fatal if inhaled ing! Suspected of dama	In RTECS for com RTECS Number: I NTP n.a. DGical Infor o the environmen control or dilution Sal Conside dance with local, a sport Inforn kin	IARC IARC I.a. mation t. n water may cause erations state, and federal r mation	ACGIH n.a. pollution.			
Cytochalasin B General Ecological Information: Waste Disposal Method: Globally Harmonized System of Classificatio Acute Toxicity: Oral, Category 2 - Danger! Acute Toxicity: Skin, Category 2 - Danger! Acute Toxicity: Inhalation, Category 1 - Da Toxic To Reproduction, Category 2 - Warm LAND TRANSPORT (US DOT)	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire 13. Dispose Dispose in accord 14. Trans on and Labelling Fatal if swallowed Fatal in contact with s inger! Fatal if inhaled ing! Suspected of dama	In RTECS for con RTECS Number: I NTP n.a. DGical Infor o the environmen control or dilution Sal Conside dance with local, a sport Inforn kin aging fertility or the	IARC IARC I.a. mation t. n water may cause erations state, and federal r mation	ACGIH n.a. pollution.			
Cytochalasin B General Ecological Information: Waste Disposal Method: Globally Harmonized System of Classificatio Acute Toxicity: Oral, Category 2 - Danger! Acute Toxicity: Skin, Category 2 - Danger! Acute Toxicity: Inhalation, Category 1 - Da Toxic To Reproduction, Category 2 - Warn LAND TRANSPORT (US DOT) DOT Proper Shipping Name	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire 13. Dispose Dispose in accord 14. Trans on and Labelling Fatal if swallowed Fatal in contact with s inger! Fatal if inhaled ing! Suspected of dama Alkaloids, solid,	In RTECS for con RTECS Number: I NTP n.a. DGical Infor o the environmen control or dilution Sal Conside dance with local, a sport Inforn kin aging fertility or the	IARC IARC I.a. mation t. n water may cause erations state, and federal r mation	ACGIH n.a. pollution.			
Cytochalasin B General Ecological Information: Waste Disposal Method: Globally Harmonized System of Classificatio Acute Toxicity: Oral, Category 2 - Danger! Acute Toxicity: Skin, Category 2 - Danger! Acute Toxicity: Inhalation, Category 1 - Da Toxic To Reproduction, Category 2 - Warm LAND TRANSPORT (US DOT) DOT Proper Shipping Name DOT Hazard Class:	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire 13. Dispose Dispose in accord 14. Trans on and Labelling Fatal if swallowed Fatal in contact with s inger! Fatal if inhaled ing! Suspected of dama Alkaloids, solid, 6.1	In RTECS for con RTECS Number: I NTP n.a. DGical Infor o the environmen control or dilution Sal Conside dance with local, a sport Inforn kin aging fertility or the	IARC IARC I.a. mation t. n water may cause erations state, and federal r mation	ACGIH n.a. pollution.			
General Ecological Information: Waste Disposal Method: Globally Harmonized System of Classification Acute Toxicity: Oral, Category 2 - Danger! Acute Toxicity: Skin, Category 2 - Danger! Acute Toxicity: Inhalation, Category 1 - Dan Toxic To Reproduction, Category 2 - Warm LAND TRANSPORT (US DOT) DOT Proper Shipping Name DOT Hazard Class: DOT Hazard Label:	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire 13. Dispose Dispose in accord 14. Trans On and Labelling Fatal if swallowed Fatal in contact with s inger! Fatal if inhaled ing! Suspected of dama Alkaloids, solid, 6.1 POISON	In RTECS for con RTECS Number: I NTP n.a. DGical Infor o the environmen control or dilution Sal Conside dance with local, a sport Inforn kin aging fertility or the	IARC IARC I.a. mation t. n water may cause erations state, and federal r mation	ACGIH n.a. pollution.			
Cytochalasin B General Ecological Information: Waste Disposal Method: Globally Harmonized System of Classification Acute Toxicity: Oral, Category 2 - Danger! Acute Toxicity: Skin, Category 2 - Danger! Acute Toxicity: Inhalation, Category 1 - Da Toxic To Reproduction, Category 2 - Warni LAND TRANSPORT (US DOT) DOT Proper Shipping Name DOT Hazard Class: DOT Hazard Label: UN/NA Number:	Cytochalasin B R CAS # 14930-96-2 12. Ecolo Avoid release int Runoff from fire 13. Dispose Dispose in accord 14. Trans Dispose in accord 14. Trans on and Labelling Fatal if swallowed Fatal if swallowed Fatal if swallowed Fatal if inhaled ing! Suspected of dama Alkaloids, solid, 6.1 POISON 1544	In RTECS for con RTECS Number: I NTP n.a. DGical Infor o the environmen control or dilution Sal Conside dance with local, a sport Inforn kin aging fertility or the	IARC IARC I.a. mation t. n water may cause erations state, and federal r mation	ACGIH n.a. pollution.			



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UN Number:	1544
Hazard Class:	6.1 - POISON
Packing Group:	II
AIR TRANSPORT (ICAO/IATA)	
ICAO/IATA Shipping Name	Alkaloids, solid, n.o.s. (Cytochalasin B)
UN Number:	1544
Hazard Class:	6.1 - POISON
Packing Group:	II
IATA Classification:	6.1
Additional Transport Information:	Transport in accordance with local, state, and federal regulations.

15. Regulatory Information

European Community Hazard Symbol codes T+: Very Toxic; Reproductive Hazard: 2

European Community Risk and Safety Phrases

R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed.

R63 - Possible risk of harm to the unborn child.

S22 - Do not breathe dust.

S24/25 - Avoid contact with skin and eyes.

S28 - After contact with skin, wash immediately with plenty of soap-suds.

 $S36/37/39 \quad \ \ \, \text{-Wear suitable protective clothing, gloves and eye/face protection.}$

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110		
1. Cytochalasin B	14930-96-2	No	No	No	No		
Other US EPA or State Lists							
Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65		
1. Cytochalasin B	14930-96-2	No	No	No	No		
Regulatory Information Statement: This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008,							

and European Directive 67/548/EEC as amended.

16. Other Information

Revision Date:

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Company Policy or Disclaimer

For research use only, not for human or veterinary use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required