

Page: 1 of 5

			7/2006 as amended b					
	Section 1.	Identification of the Substan	ce/Mixture and of	the Company/U	ndertaking			
1.1	Product Code: Product Name: Synonyms:	22432 Astragaloside III (3,beta.,6.alpha.,16.beta. 2-ObetaD-glucopyranc			droxy-9,19-cyclolanostan-3-y AST-III;			
1.2	Relevant identified uses o	f the substance or mixture a	nd uses advised a	gainst:				
	Relevant identified uses: For research use only, not for human or veterinary use.							
1.3	Details of the Supplier of the Safety Data Sheet:							
	Company Name:	Cayman Chemical Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	any					
	Web site address:	www.caymanchem.com						
	Information:	Cayman Chemical Comp	any	+1 (73	4)971-3335			
1.4	Emergency telephone nun Emergency Contact:	nber: CHEMTREC Within USA CHEMTREC Outside US		•	0)424-9300 3)527-3887			
		Section 2. Haz	zards Identifi	cation				
2.2	Label Elements:							
2.3	GHS Precaution Phrases No phrases apply. GHS Response Phrases No phrases apply. GHS Storage and Dispo Please refer to Section 7 the Adverse Human Health Effects and Symptoms:	: sal Phrases: for Storage and Section 13 for Material may be irritating to th May be harmful by inhalation May cause eye, skin, or respi To the best of our knowledge	Disposal information ne mucous membra , ingestion, or skin a iratory system irritat	n. nes and upper res absorption. ion. roperties have not	spiratory tract. t been thoroughly investigate			
	GHS Hazard Phrases: Based on evaluation of cu GHS Precaution Phrases No phrases apply. GHS Response Phrases No phrases apply. GHS Storage and Dispo Please refer to Section 7 th Adverse Human Health Effects and Symptoms: Sect	arrently available data this subs s: sal Phrases: for Storage and Section 13 for Material may be irritating to th May be harmful by inhalation May cause eye, skin, or respi To the best of our knowledge ion 3. Composition	Disposal information ne mucous membra , ingestion, or skin a iratory system irritat , the toxicological p /Information	n. nes and upper res absorption. ion. roperties have not on Ingredie	spiratory tract. t been thoroughly investigate nts			
CAS	GHS Hazard Phrases: Based on evaluation of cu GHS Precaution Phrases No phrases apply. GHS Response Phrases No phrases apply. GHS Storage and Dispo Please refer to Section 7 th Adverse Human Health Effects and Symptoms: Sect	arrently available data this subs s: sal Phrases: for Storage and Section 13 for Material may be irritating to th May be harmful by inhalation May cause eye, skin, or respi To the best of our knowledge ion 3. Composition onents (Chemical Name)/	Disposal information ne mucous membra , ingestion, or skin a iratory system irritat	n. nes and upper res absorption. ion. roperties have not	spiratory tract. t been thoroughly investigate			

Multi-region format



Revision: 08/01/2017

		Section 4. First Aid Measures
4.1	Description of First Aid	
	Measures:	
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
	In Case of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.
	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.
		Section 5. Fire Fighting Measures
5.1	Suitable Extinguishing	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
	Media:	Use water spray to cool fire-exposed containers.
	Unsuitable Extinguishing Media:	g A solid water stream may be inefficient.
5.2	Flammable Properties ar Hazards:	I d No data available.
		No data available.
	Flash Pt:	No data.
	Explosive Limits:	LEL: No data. UEL: No data.
	Autoignition Pt:	No data.
5.3	Fire Fighting Instructions	s: 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.
		Section 6. Accidental Release Measures
6.1	Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation.
	Protective Equipment an	d As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,
	Emergency Procedures:	and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
6.2	Environmental Precautions:	Take steps to avoid release into the environment, if safe to do so.
6.3	Methods and Material Fo	r Contain spill and collect, as appropriate.
	Containment and Cleanin	hgTransfer to a chemical waste container for disposal in accordance with local regulations.
	Up:	
		Section 7. Handling and Storage
7.1	Precautions To Be Taker	Avoid breathing dust/fume/gas/mist/vapours/spray.
	in Handling:	Avoid prolonged or repeated exposure.
7.2	Precautions To Be Taker	Neep container tightly closed.
	in Storing:	Store in accordance with information listed on the product insert.
	Sec	tion 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	
1		

Multi-region format



 8.2.1 Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne (Ventilation etc.): levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hyglenic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower. Wash thoroughly after handling. No data available. Section 9. Physical and Chemical Properties Physical States: []Gas []Liquid [X]Solid Appearance and Odor: A crystalline solid pH: No data. Boiling Point: No data. Hofmation Rate: No data. Flash Pt: No data. Fash Pt: No data. Fash Pt: No data. Fash Pt: No data. Fapor Density (vs. Air = 1): No data. Specific Gravity (Water = 1): No data. Specific Gravity (Water = 1): No data. Solubility in Vete: No data. Solubility in Vete: No data. Solubility in the: No data. Solubility Notes: -0.5 mg/ml in a 1:1 solution of DMSC:PBS (pH 7.2); -30 mg/ml in DMSC; -20 mg/ml in DMF; OctanolWater Partition No data. Viscosity: No data. 		httm://	
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9.2 Other Information Percent Volatile: No data.		Decomposition Temperature	e: No data.
Percent Volatile: No data.		Viscosity:	No data.
	9.2	Other Information	
Molecular Formula & Weight: C41H68O14 785.0		Percent Volatile:	No data.
		Molecular Formula & Weight	t: C41H68O14 785.0

Multi-region format



Revision: 08/01/2017

			Section 10. Stability and	Reacti	vity		
10.1	Reactivi	ty:	No data available.				
10.2	Stability	-					
10.3 Stability Note(s): Stable if stored in accordance with information listed on the product insert.						insert.	
	Polymer		Will occur [] Will not occur [X]				
10.4	0.4 Conditions To Avoid: No data available.						
10.5	Incompatibility - Materials strong oxidizing agents						
	To Avoid						
10.6	Hazardous		carbon dioxide				
	-	osition or	carbon monoxide				
	Byprodu		• ·· ·· - · · ·				
			Section 11. Toxicological				
11.1	Informat		The toxicological effects of this product have	ve not beer	n thoroughly st	udied.	
	Toxicolo	gical Effects:					
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA
8468	37-42-3	.betaD-Xylopyra		n.a.	n.a.	n.a.	n.a.
			16.beta.,20R,24S)-20,24-epoxy-6,16,25-tri olanostan-3-yl 2-ObetaD				
			Section 12. Ecological Ir	oformat	ion		
12.1	Toxicity	:	Avoid release into the environment.				
			Runoff from fire control or dilution water ma	ay cause p	ollution.		
12.2	Persiste		No data available.				
	Degrada	-					
12.3		mulative	No data available.				
	Potentia						
12.4	Mobility		No data available.				
12.5			No data available.				
40.0	assessm		No doto ovoilable				
12.6	Other ad	lverse effects:	No data available.				
			Section 13. Disposal Con	siderat	ions		
13.1	Waste D	isposal Method:	Dispose in accordance with local, state, an	nd federal r	egulations.		
			Section 14. Transport Ir	nformat	ion		
14.1	LAND T	RANSPORT (US I	DOT):				
		r Shipping Name:	-				
	OT Hazar		0				
U	N/NA Nun	nber:					
14.1	LAND T	RANSPORT (Euro	opean ADR/RID):				
Α	ADR/RID Shipping Name: Not dangerous goods.						
U	UN Number:						
Н	Hazard Class:						

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14.3 AIR TR	ANSPORT (ICAO/	IATA):		
ICAO/IATA	Shipping Name:	Not dangerous goods.		
Additional Tra	nsport	Transport in accordance with lo	cal, state, and federa	l regulations.
		Section 15. Regul	atory Informa	tion
EPA SARA (S	uperfund Amendm	nents and Reauthorization Act of	of 1986) Lists	
CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ
84687-42-3	.betaD-Xylopyra	anoside,	No	No

CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
84687-42-3 .betaD-Xylopyra (3.beta.,6.alpha.,		anoside, 16.beta.,20R,24S)-20,24-epoxy- y-9,19-cyclolanostan-3-yl	No	No	No	
CAS #	Hazardous Com	ponents (Chemical Name) Other US EPA or State Lists		·		
84687-42-3		anoside, 16.beta.,20R,24S)-20,24-epoxy- y-9,19-cyclolanostan-3-yl	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA - PROP.65: No			
Regulatory Information Statement:		This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.				
		Section 16. Oth	er Information	า		
Revision Date:		08/01/2017				
Additional Information About This Product:		No data available.				
Company Policy or Disclaimer:		DISCLAIMER: This information is currently available to us. However express or implied, with respect use. Users should make their ow their particular purposes.	er, we make no warra to such information, a	anty of merchantabilit and we assume no lia	y or any other warranty ability resulting from its	