

Revision: 07/12/2019

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		Contine 1 let	entification of the Substance/Mixture and of th		ndortaking		
		Section 1. 10		ne Company/Ui	панта		
.1	Produc	t Code:	27296				
	Produc		Plantamajoside				
	Synony	ms:		thyl 3-ObetaD-glucopyranosylbetaD-glucopyranoside			
	4-[(2E)-3-(3,4-dihydroxyphenyl)-2-propenoate];						
.2	Relevant identified uses of the substance or mixture and uses advised against:						
Relevant identified uses: For research use only, not for human or veterina							
.3	Details of the Supplier of the Safety Data Sheet:						
	Comp	any Name:	Cayman Chemical Company				
			1180 E. Ellsworth Rd.				
		the end does not	Ann Arbor, MI 48108				
		ite address: nation:	www.caymanchem.com	1 (72)	1)071 2225		
			Cayman Chemical Company	+1 (734	4)971-3335		
1.4	-	ncy telephone numb					
	Emerg	gency Contact:	CHEMTREC Within USA and Canada:		0)424-9300		
			CHEMTREC Outside USA and Canada:	+1 (70-	3)527-3887		
			_				
			Section 2. Hazards Identification	ation			
2.1	Classifi	cation of the Substa		ation			
		cation of the Substan		ation			
	Label E	lements:	nce or Mixture:	ation			
	Label E GHS S			ation			
	Label E GHS S GHS	lements: Signal Word: Hazard Phrases:	nce or Mixture: None		cording to GHS.		
	Label E GHS S GHS B Based	lements: Signal Word: Hazard Phrases: I on evaluation of curre	nce or Mixture:		cording to GHS.		
	Label E GHS S GHS Based GHS	lements: Signal Word: Hazard Phrases: I on evaluation of curre Precaution Phrases:	nce or Mixture: None		cording to GHS.		
	Label E GHS S GHS Based GHS No ph	lements: Signal Word: Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply.	nce or Mixture: None		cording to GHS.		
	Label E GHS S GHS Based GHS No ph GHS	lements: Signal Word: Hazard Phrases: d on evaluation of curre Precaution Phrases: rases apply. Response Phrases:	nce or Mixture: None		cording to GHS.		
	Label E GHS S GHS Based GHS No ph GHS	lements: Signal Word: Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply.	nce or Mixture: None ently available data this substance or mixture is no		cording to GHS.		
	Label E GHS S GHS B Based GHS B No ph GHS S	lements: Signal Word: Hazard Phrases: d on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa	nce or Mixture: None ently available data this substance or mixture is no	ot classifiable ac	cording to GHS.		
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2.1 2.2 2.3	Label E GHS S GHS B Based GHS B No ph GHS S Pleas Advers	lements: Signal Word: Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for se Human Health M and Symptoms: M T	nce or Mixture: None ently available data this substance or mixture is no I Phrases: Storage and Section 13 for Disposal information. Material may be irritating to the mucous membrane May be harmful by inhalation, ingestion, or skin abs May cause eye, skin, or respiratory system irritation	ot classifiable ac es and upper res sorption. n. perties have not	piratory tract. been thoroughly investigated		
2.2	Label E GHS S GHS B Based GHS B No ph GHS S Pleas Advers Effects	lements: Signal Word: Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for the Human Health and Symptoms: M Section	I Phrases: Storage and Section 13 for Disposal information. Material may be irritating to the mucous membrane May be harmful by inhalation, ingestion, or skin ab May cause eye, skin, or respiratory system irritation to the best of our knowledge, the toxicological pro- on 3. Composition/Information o	ot classifiable ac es and upper res sorption. n. perties have not	piratory tract. been thoroughly investigated		
2.2 2.3	Label E GHS S GHS B Based GHS B No ph GHS S Pleas Advers Effects	lements: Signal Word: Hazard Phrases: I on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for the Human Health and Symptoms: M Section	I Phrases:         Storage and Section 13 for Disposal information.         Material may be irritating to the mucous membrane         May be harmful by inhalation, ingestion, or skin abs         May cause eye, skin, or respiratory system irritation         To the best of our knowledge, the toxicological pro         On 3. Composition/Information o         Dents (Chemical Name)/	ot classifiable ac es and upper res sorption. n. perties have not	piratory tract. been thoroughly investigated		
2.2 2.3 CAS RTE	Label E GHS S GHS B Based GHS No ph GHS Pleas Advers Effects	lements: Signal Word: Hazard Phrases: d on evaluation of curre Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for se Human Health M and Symptoms: M T Section Hazardous Compon	I Phrases:         Storage and Section 13 for Disposal information.         Material may be irritating to the mucous membrane         May cause eye, skin, or respiratory system irritation         To the best of our knowledge, the toxicological properties         On 3. Composition/Information on the mucous         None         Densition (Chemical Name)/         None	ot classifiable ac es and upper res sorption. n. operties have not <b>in Ingredie</b> <b>EC No./</b>	piratory tract. been thoroughly investigated		



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		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:	a A solid water stream may be inefficient.
5.2	Flammable Properties ar Hazards:	dNo 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	<b>s:</b> 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	Take steps to avoid release into the environment, if safe to do so.
	Precautions:	
6.3		r Contain spill and collect, as appropriate.
	Up:	ngTransfer to a chemical waste container for disposal in accordance with local regulations.
	ор.	
		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		Keep 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:	



	TTM TCA 1						
8.2	Exposure Controls:						
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 equip	ment:					
	Eye Protection:	Safety glasses					
	Protective Gloves: Compatible chemical-resistant gloves						
	Other Protective Clothing:	Clothing:Lab coat					
	Respiratory Equipment	espiratory Equipment NIOSH approved respirator, as conditions warrant.					
	(Specify Type):						
	Work/Hygienic/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.					
	Se	ection 9. Physical and Chemical Properties					
9.1	Information on Basic Phys	ical and Chemical Properties					
	Physical States:	[]Gas []Liquid [X]Solid					
	Appearance and Odor:	A crystalline solid					
	pH:	No data.					
	Melting Point:	No data.					
	Boiling Point:	No data.					
	Flash Pt:	No data.					
	Evaporation Rate:	No data.					
	Flammability (solid, gas):	No data available.					
	Explosive Limits:	LEL: No data. UEL: No data.					
Vapor Pressure (vs. A		mm No data.					
	Hg):						
	Vapor Density (vs. Air = 1)	: No data.					
	Specific Gravity (Water = 1	I): No data.					
	Solubility in Water:	No data.					
	Solubility Notes:	~10 mg/ml in PBS (pH 7.2); ~10 mg/ml in EtOH; ~33 mg/ml in DMSO; ~50 mg/ml in DMF;					
	Octanol/Water Partition	No data.					
	Coefficient:						
	Autoignition Pt:	No data.					
	Decomposition Temperatu						
	Viscosity:	No data.					
9.2	Other Information						
	Percent Volatile:	No data.					
	Molecular Formula & Weig	ht: C29H36O16 640.6					



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			Section 10. Stability	ind Reacti	vity			
10.1	Reactivit	y:	No data available.					
10.2	Stability	:	Unstable [ ] Stable [ X ]					
10.3	Stability	Note(s):	Stable if stored in accordance with information listed on the product insert.					
	Polymer	ization:	Will occur [ ] Will not occur [ X ]					
10.4	Conditio	ns To Avoid:	No data available.					
<ul> <li>Incompatibility - Materials strong oxidizing agents</li> <li>To Avoid:</li> </ul>								
10.6	Hazardous Decomposition or		carbon dioxide					
10.0			carbon monoxide					
	Byprodu							
			Section 11. Toxicologi	cal Informa	ation			
11.1	Informat	ion on	The toxicological effects of this produ			udied.		
	Toxicolo	gical Effects:						
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
1047	77-68-6	Plantamajoside			n.a.	n.a.	n.a.	
				n.a.	n.a.	n.a.	1	
			Section 12. Ecologic			11.d.	11.0.	
12.1	Toxicity:		Section 12. Ecologic Avoid release into the environment.			11.0.	1	
12.1	Toxicity:			al Informat	ion	11.4.		
12.1	Toxicity: Persiste		Avoid release into the environment.	al Informat	ion	11.4.		
	-	nce and	Avoid release into the environment. Runoff from fire control or dilution wa	al Informat	ion	11.0.		
	Persiste	nce and bility:	Avoid release into the environment. Runoff from fire control or dilution wa	al Informat	ion	11.2.		
12.2	Persiste Degrada	nce and bility: mulative	Avoid release into the environment. Runoff from fire control or dilution wa No data available.	al Informat	ion	11.2.		
12.2	Persister Degrada Bioaccu	nce and bility: mulative I:	Avoid release into the environment. Runoff from fire control or dilution wa No data available.	al Informat	ion	11.2.		
12.2 12.3	Persister Degrada Bioaccur Potentia Mobility	nce and bility: mulative I: in Soil:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available.	al Informat	ion	11.0.		
12.2 12.3 12.4	Persister Degrada Bioaccur Potentia Mobility	nce and bility: mulative l: in Soil: of PBT and vPvB	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available.	al Informat	ion			
12.2 12.3 12.4	Persister Degrada Bioaccur Potentia Mobility Results assessm	nce and bility: mulative l: in Soil: of PBT and vPvB	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available.	al Informat	ion			
12.2 12.3 12.4 12.5	Persister Degrada Bioaccur Potentia Mobility Results assessm	nce and bility: mulative I: in Soil: of PBT and vPvB tent:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available.	al Informat	ion ollution.			
12.2 12.3 12.4 12.5	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB tent:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available.	al Informat er may cause p Considerat	ion ollution.			
12.2 12.3 12.4 12.5 12.6	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB tent: verse effects:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal (	al Informat er may cause p Considerat	ion ollution. ions egulations.			
12.2 12.3 12.4 12.5 12.6	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB tent: verse effects:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal ( Dispose in accordance with local, sta Section 14. Transpo	al Informat er may cause p Considerat	ion ollution. ions egulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D	nce and bility: mulative I: in Soil: of PBT and vPvB ent: verse effects:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. No data available. Dispose in accordance with local, sta Section 14. Transported Dotted	al Informat er may cause p Considerat	ion ollution. ions egulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D	nce and bility: mulative l: in Soil: of PBT and vPvB ent: verse effects: isposal Method: RANSPORT (US I	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. No data available. Dispose in accordance with local, sta Section 14. Transported Dotted	al Informat er may cause p Considerat	ion ollution. ions egulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D LAND T	nce and bility: mulative l: in Soil: of PBT and vPvB eent: verse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. No data available. Dispose in accordance with local, sta Section 14. Transported Dotted	al Informat er may cause p Considerat	ion ollution. ions egulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D LAND T OT Proper	nce and bility: mulative l: in Soil: of PBT and vPvB eent: verse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. <b>Section 13. Disposal (</b> Dispose in accordance with local, sta <b>Section 14. Transpo</b> <b>Dot):</b> Not dangerous goods.	al Informat er may cause p Considerat	ion ollution. ions egulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D LAND T OT Proper OT Hazaro	nce and bility: mulative l: in Soil: of PBT and vPvB ent: verse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: nber:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. <b>Section 13. Disposal (</b> Dispose in accordance with local, sta <b>Section 14. Transpo</b> <b>Dot):</b> Not dangerous goods.	al Informat er may cause p Considerat	ion ollution. ions egulations.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1 A	Persister Degrada Bioaccur Potentia Mobility Results assessm Other ad Waste D LAND T OT Proper OT Hazaro	nce and bility: mulative l: in Soil: of PBT and vPvB ent: verse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal ( Dispose in accordance with local, sta Section 14. Transpo DOT): Not dangerous goods.	al Informat er may cause p Considerat	ion ollution. ions egulations.			

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14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name:

: Not dangerous goods. Transport in accordance with local, state, and federal regulations.

Additional Transport Information:

# Section 15. Regulatory Information

CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
104777-68-6	Plantamajoside		No	No	No	
CAS #	Hazardous Components (Chemical Name)		Other US EPA o	r State Lists	•	
104777-68-6	Plantamajoside		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. Ot	her Information	on		
Revision Date:		07/12/2019				
Additional Info This Product:	ormation About	No data available.				
Company Poli	cy or Disclaimer:	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.				