

Revision: 07/09/2018

			entification of the Substance/Mixture and of	the Company/O	nuenaking		
I.1 Product Code: Product Name: Synonyms:			25050 1,5-Dicaffeoylquinic Acid (1S,3R,4R,5R)-1,3-bis[[3-(3,4-dihydroxyphenyl)-1-oxo-2-propen-1-yl]oxy]-4,5-dihydroxy-cycloł anecarboxylic acid; 1,5-DCQA; 1,3-Dicaffeoylquinic acid;				
1.2	Releva	nt identified uses of t	the substance or mixture and uses advised a	against:			
	Relevant identified uses: For research use only, not for human or veterinary use.						
.3	Details of the Supplier of the Safety Data Sheet:						
	Comp	bany Name:	Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108				
	Web s	site address:	www.caymanchem.com				
	Inform	nation:	Cayman Chemical Company	+1 (73	4)971-3335		
.4	Emerge	ency telephone numb	per:				
	Emer	gency Contact:	CHEMTREC Within USA and Canada: CHEMTREC Outside USA and Canada:		)0)424-9300 )3)527-3887		
			Section 2. Hazards Identifi	cation			
.1	Classifi	ication of the Substa	nce or Mixture:				
		ication of the Substa lements:	nce or Mixture:				
	Label E		nce or Mixture: None				
	Label E GHS S	lements:					
	Label E GHS S GHS	ilements: Signal Word: Hazard Phrases:		not classifiable a	ccording to GHS.		
	Label E GHS GHS Based GHS	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases:	<b>None</b> ently available data this substance or mixture is	not classifiable a	ccording to GHS.		
	Label E GHS GHS Based GHS No ph	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: mases apply.	<b>None</b> ently available data this substance or mixture is	not classifiable a	ccording to GHS.		
	Label E GHS GHS Based GHS No ph GHS	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: mases apply. Response Phrases:	<b>None</b> ently available data this substance or mixture is	not classifiable a	ccording to GHS.		
	Label E GHS GHS Based GHS No ph GHS No ph	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: mases apply. Response Phrases: mases apply.	<b>None</b> ently available data this substance or mixture is	not classifiable a	ccording to GHS.		
	Label E GHS GHS Based GHS No ph GHS No ph	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: mases apply. Response Phrases: mases apply. Storage and Disposa	None ently available data this substance or mixture is al Phrases:		ccording to GHS.		
.2	Label E GHS Based GHS No ph GHS No ph GHS Pleas	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: mases apply. Response Phrases: mases apply. Storage and Disposa e refer to Section 7 for	None ently available data this substance or mixture is al Phrases: r Storage and Section 13 for Disposal information	on.			
2.1 2.2	Label E GHS GHS Based GHS No ph GHS Pleas Advers	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: mases apply. Response Phrases: mases apply. Storage and Disposa e refer to Section 7 for se Human Health s and Symptoms:	None ently available data this substance or mixture is al Phrases:	on. ines and upper re absorption. tion.	spiratory tract.		
2.2	Label E GHS GHS Based GHS No ph GHS Pleas Advers	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: mases apply. Response Phrases: mases apply. Storage and Disposa e refer to Section 7 for se Human Health s and Symptoms: N T	None ently available data this substance or mixture is al Phrases: r Storage and Section 13 for Disposal information Material may be irritating to the mucous membra May be harmful by inhalation, ingestion, or skin a May cause eye, skin, or respiratory system irrita	on. Ines and upper re absorption. tion. iroperties have no	spiratory tract. t been thoroughly investigated.		
2.2 2.3	Label E GHS GHS Based GHS No ph GHS Pleas Advers Effects	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: mases apply. Response Phrases: mases apply. Storage and Disposa e refer to Section 7 for se Human Health and Symptoms: M Sectio	None ently available data this substance or mixture is al Phrases: r Storage and Section 13 for Disposal information Material may be irritating to the mucous membra May be harmful by inhalation, ingestion, or skin a May cause eye, skin, or respiratory system irrita To the best of our knowledge, the toxicological p on 3. Composition/Information nents (Chemical Name)/ Concentration	on. Ines and upper re absorption. tion. iroperties have no	spiratory tract. t 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 solid water stream may be inefficient.
5.2	Flammable Properties an Hazards:	<b>d</b> 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	: 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 Cleanir	gTransfer 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	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:	

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	<b>_</b>						
8.2	Exposure Controls:						
8.2.1		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:	atible chemical-resistant gloves					
	Other Protective Clothing:	;oat					
	Respiratory Equipment	H 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.					
	<u> </u>	ction 0 Physical and Chamical Properties					
		ction 9. Physical and Chemical Properties					
9.1	-	cal 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. Air or	mm No data.					
	Hg):						
	Vapor Density (vs. Air = 1):	No data.					
	Specific Gravity (Water = 1	): No data.					
	Solubility in Water:	No data.					
	Solubility Notes:	~25 mg/ml in PBS (pH 7.2); ~50 mg/ml in EtOH & DMSO; ~71 mg/ml in DMF;					
	Octanol/Water Partition	No data.					
	Coefficient:						
	Autoignition Pt:	No data.					
	Decomposition Temperatu	re: No data.					
	Viscosity:	No data.					
9.2	Other Information						
	Percent Volatile:	No data.					
	Molecular Formula & Weig						



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			Section 10. Stability a	and Reactiv	vity			
10.1 Reactivity:     No data available.								
10.2	D.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 ]					
<ul> <li>10.4 Conditions To Avoid: No data available.</li> <li>10.5 Incompatibility - Materials strong oxidizing agents To Avoid:</li> </ul>								
10.6	Hazardo		carbon dioxide					
		osition or						
	Byprodu		carbon monoxide					
			Section 11. Toxicologi	cal Informa	ation			
11.1	Informat	ion on	The toxicological effects of this produ			udied.		
	Toxicolo	gical Effects:	· · ·					
CAS	#	Hazardous Com	oonents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
		1						
198	70-46-3	1,5-Dicaffeoylquir		n.a.	n.a.	n.a.	n.a.	
1987	70-46-3	1,5-Dicaffeoylquir				n.a.	n.a.	
1987 12.1	70-46-3 Toxicity		nic Acid			n.a.	n.a.	
			Section 12. Ecologic	al Informat	ion	n.a.	n.a.	
		<u>.</u>	ic Acid Section 12. Ecologic Avoid release into the environment.	al Informat	ion	n.a.	n.a.	
12.1	Toxicity	nce and	Avoid release into the environment. Runoff from fire control or dilution wa	al Informat	ion	n.a.	n.a.	
12.1	Toxicity Persiste Degrada	nce and	Avoid release into the environment. Runoff from fire control or dilution wa	al Informat	ion	n.a.	n.a.	
12.1 12.2	Toxicity Persiste Degrada Bioaccu Potentia	nce and bility: mulative I:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available.	al Informat	ion	n.a.	n.a.	
12.1 12.2	Toxicity Persiste 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	n.a.	n.a.	
12.1 12.2 12.3	Toxicity Persiste Degrada Bioaccu Potentia Mobility	nce and bility: mulative I: in Soil: of PBT and vPvB	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available.	al Informat	ion	n.a.	n.a.	
12.1 12.2 12.3 12.4	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessm	nce and bility: mulative I: in Soil: of PBT and vPvB	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available.	al Informat	ion	n.a.	n.a.	
12.1 12.2 12.3 12.4 12.5	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessm	nce and bility: mulative I: in Soil: of PBT and vPvB nent:	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	l ollution.	n.a.	n.a.	
12.1 12.2 12.3 12.4 12.5	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac	nce and bility: mulative I: in Soil: of PBT and vPvB nent:	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 ter may cause pr Considerat	ion ollution.	n.a.	n.a.	
12.1 12.2 12.3 12.4 12.5 12.6	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac	nce and bility: mulative I: in Soil: of PBT and vPvB nent: Iverse 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. Section 13. Disposal (	al Informat ter may cause pr ter may cause pr ter may cause pr ter may cause pr ter may cause pr	ion ollution. ions egulations.	n.a.	n.a.	
12.1 12.2 12.3 12.4 12.5 12.6	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac	nce and bility: mulative I: in Soil: of PBT and vPvB nent: Iverse 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. Section 13. Disposal ( Dispose in accordance with local, state Section 14. Transport	al Informat ter may cause pr ter may cause pr ter may cause pr ter may cause pr ter may cause pr	ion ollution. ions egulations.	n.a.	n.a.	
12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ac Waste D	nce and bility: mulative l: in Soil: of PBT and vPvB nent: Iverse effects: isposal Method:	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. No data available. Section 13. Disposal ( Dispose in accordance with local, state Section 14. Transported.	al Informat ter may cause pr ter may cause pr ter may cause pr ter may cause pr ter may cause pr	ion ollution. ions egulations.	n.a.	n.a.	
12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ac Waste D	nce and bility: mulative l: in Soil: of PBT and vPvB hent: lverse effects: isposal Method: RANSPORT (US I r Shipping 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. No data available. No data available. Section 13. Disposal ( Dispose in accordance with local, state Section 14. Transported.	al Informat ter may cause pr ter may cause pr ter may cause pr ter may cause pr ter may cause pr	ion ollution. ions egulations.	n.a.	n.a.	
12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac Waste D LAND T	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse 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. No data available. Section 13. Disposal ( Dispose in accordance with local, state Section 14. Transported.	al Informat ter may cause pr ter may cause pr ter may cause pr ter may cause pr ter may cause pr	ion ollution. ions egulations.	n.a.	n.a.	
12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac Waste D LAND T OT Prope OT Hazard	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse 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. No data available. Section 13. Disposal ( Dispose in accordance with local, sta Section 14. Transpo	al Informat ter may cause pr ter may cause pr ter may cause pr ter may cause pr ter may cause pr	ion ollution. ions egulations.	n.a.	n.a.	
12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac Waste D LAND T OT Prope OT Hazard	nce and ibility: mulative l: in Soil: of PBT and vPvB nent: lverse 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. No data available. No data available. Section 13. Disposal ( Dispose in accordance with local, sta Section 14. Transpo	al Informat ter may cause pr ter may cause pr ter may cause pr ter may cause pr ter may cause pr	ion ollution. ions egulations.	n.a.	n.a.	
12.1 12.2 12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1 A	Toxicity Persiste Degrada Bioaccu Potentia Mobility Results assessn Other ac Waste D LAND T OT Prope OT Hazard	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse 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. No data available. No data available. Dispose in accordance with local, state Section 14. Transposed Dott: Not dangerous goods.	al Informat ter may cause pr ter may cause pr ter may cause pr ter may cause pr ter may cause pr	ion ollution. ions egulations.	n.a.	n.a.	



14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name:

Not dangerous goods.

Additional Transport Information:

# Section 15. Regulatory Information

Transport in accordance with local, state, and federal regulations.

CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
19870-46-3	1,5-Dicaffeoylquinic Acid		No	No	No	
CAS #	Hazardous Components (Chemical Name)		Other US EPA or	r State Lists	•	
19870-46-3	1,5-Dicaffeoylquinic Acid		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 Informatio	on		
Revision Date:		07/09/2018				
Additional Info	rmation About	No data available.				
This Product:						
Company Policy 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.				