

Revision: 05/06/2018

			entification of the Substar			5
.1	Produc	t Code:	24781		. ,	
••		t Name:	FLAC6			
	Synony			etrahydroxy-N-(4 4 5	566778899	9-tridecafluorononyl)-4-(((2S,3
	• ,,		S,5R,6R)-3,4,5-trihydrox			
.2	Releva	nt identified uses of t	he substance or mixture a	and uses advised a	igainst:	
	Relev	ant identified uses:	For research use only, no	ot for human or vete	rinary use.	
.3	Details	of the Supplier of the	e Safety Data Sheet:			
	Comp	oany Name:	Cayman Chemical Comp	bany		
			1180 E. Ellsworth Rd.			
			Ann Arbor, MI 48108			
	Web s	site address:	www.caymanchem.com			
	Inform	nation:	Cayman Chemical Comp	bany	+1 (734	4)971-3335
.4	-	ency telephone numb				
	Emer	gency Contact:	CHEMTREC Within USA			0)424-9300
			CHEMTREC Outside US	A and Canada:	+1 (70	3)527-3887
			Section 2. Haz	zards Identifi	cation	
	<u> </u>		NA ¹ 4 11			
2.1	Classif	ication of the Substa	nce or Mixture:			
		ication of the Substa lements:	nce or Mixture:			
	Label E		None			
	Label E GHS S	lements:				
	Label E GHS S GHS	ilements: Signal Word: Hazard Phrases:		stance or mixture is	not classifiable ac	ccording to GHS.
	Label E GHS GHS Based	ilements: Signal Word: Hazard Phrases:	None ently available data this sub	stance or mixture is	not classifiable ac	ccording to GHS.
	Label E GHS GHS Based GHS	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases:	None ently available data this sub	stance or mixture is	not classifiable ac	cording to GHS.
	Label E GHS GHS Based GHS No ph	Elements: Signal Word: Hazard Phrases: d on evaluation of curr Precaution Phrases: mases apply.	None ently available data this sub	stance or mixture is	not classifiable ac	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:	None ently available data this sub	stance or mixture is	not classifiable ac	cording 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.	None ently available data this sub	stance or mixture is	not classifiable ac	cording to GHS.
	Label E GHS Based GHS No ph GHS No ph GHS	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 sub al Phrases:			cording to GHS.
2.2	Label E GHS 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 sub al Phrases: r Storage and Section 13 for	Disposal informatic	ın.	
2.2	Label E GHS GHS Based GHS No ph 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	None ently available data this sub al Phrases: r Storage and Section 13 for Material may be irritating to t	[.] Disposal informatic he mucous membra	on. nes and upper res	
2.2	Label E GHS GHS Based GHS No ph 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	None ently available data this sub- al Phrases: r Storage and Section 13 for Material may be irritating to t May be harmful by inhalation	Disposal informatic he mucous membra i, ingestion, or skin a	n. nes and upper res absorption.	
2.2	Label E GHS GHS Based GHS No ph 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 sub- al Phrases: r Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp	Disposal informatic he mucous membra i, ingestion, or skin a iratory system irritat	on. nes and upper res absorption. ion.	spiratory tract.
2.2	Label E GHS GHS Based GHS No ph 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 sub- al Phrases: r Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge	Disposal informatic he mucous membra i, ingestion, or skin a iratory system irritat e, the toxicological p	on. Ines and upper res absorption. ion. roperties have not	spiratory tract. t been thoroughly investigated
2.2	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 Section	None ently available data this sub- al Phrases: r Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp to the best of our knowledge on 3. Composition	Disposal informatic he mucous membra i, ingestion, or skin a iratory system irritat e, the toxicological p	on. Ines and upper res absorption. ion. roperties have not on Ingredie	spiratory tract. t been thoroughly investigated
2.1 2.2 2.3 CAS RTE	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 Section	None ently available data this sub- al Phrases: r Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp to the best of our knowledge on 3. Composition	Disposal informatic he mucous membra i, ingestion, or skin a iratory system irritat e, the toxicological p	on. Ines and upper res absorption. ion. roperties have not	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 Section Hazardous Component	None ently available data this sub- al Phrases: r Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp to the best of our knowledge on 3. Composition	Disposal informatic he mucous membra i, ingestion, or skin a iratory system irritat a, the toxicological p /Information	on. Ines and upper res absorption. ion. roperties have not on Ingredie	spiratory tract. t been thoroughly investigated nts

Multi-region format



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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:	g A solid water stream may be inefficient.
5.2	Flammable Properties an Hazards:	IdNo 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:	
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.
		ngTransfer 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	NKeep 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		

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8.2	Exposure Controls:						
8.2.1	-	Use process enclosures, local exhaust ventilation, or other engineering contr	rols to control airborne				
		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/Hygienic/Maintenan	Do not take internally.					
	ce Practices:	Facilities storing or utilizing this material should be equipped with an eyewas	h and a safety shower				
1		Wash thoroughly after handling.					
I		No data available.					
	Se	ection 9. Physical and Chemical Properties					
9.1	Information on Basic Physi	ical and Chemical Properties					
	Physical States:	[] Gas [] Liquid [X] Solid					
	Appearance and Odor:	A powder					
	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 Hg):	mm No data.					
	Vapor Density (vs. Air = 1):	No data.					
	Specific Gravity (Water = 1						
	Solubility in Water:	~ 28 mM					
	Solubility Notes:	Soluble in: MeOH; DMSO;					
	Octanol/Water Partition	No data.					
	Coefficient:						
	Autoignition Pt:	No data.					
	Decomposition Temperatu	ire: No data.					
	Decomposition remperatu						
	Viscosity:	No data.					
9.2		No data.					
9.2	Viscosity:	No data.					



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			Section 10. Stability	and Reactive	vity				
0.1	Reactivit	y:	No data available.						
0.2	Stability: Unstable [] Stable [X]								
10.3 Stability Note(s):			Stable if stored in accordance with in	nformation listed of	on the product	insert.			
	Polymeri	ization:	Will occur [] Will not occur [X]					
10.4 Conditions To Avoid:			No data available.						
10.5 Incompatibility - Materials No data available.									
	To Avoid: Hazardous								
0.6			No data available.						
	=	osition or							
	Byprodu	cts:							
			Section 11. Toxicolog	ical Informa	ation				
1.1	Informati	ion on	The toxicological effects of this prod	uct have not beer	n thoroughly st	udied.			
	Toxicolo	gical Effects:							
CAS #	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA		
	NA	FLAC6		n.a.	n.a.	n.a.	n.a.		
			Section 12. Ecologic	al Informat	ion				
2.1	Toxicity:		Avoid release into the environment.						
			Runoff from fire control or dilution wa	Runoff from fire control or dilution water may cause pollution.					
12.2 Persistence and				•					
2.2	Persister	nce and	No data available.						
2.2	Persister Degrada		No data available.						
2.2 2.3		bility:	No data available. No data available.						
	Degrada	bility: mulative							
	Degradal Bioaccur	bility: mulative I:							
2.3	Degradal Bioaccur Potential Mobility	bility: mulative I: in Soil:	No data available.						
2.3 2.4	Degradal Bioaccur Potential Mobility	bility: mulative I: in Soil: of PBT and vPvB	No data available. No data available.						
2.3 2.4	Degradal Bioaccur Potential Mobility Results o assessm	bility: mulative I: in Soil: of PBT and vPvB	No data available. No data available.						
2.3 2.4 2.5	Degradal Bioaccur Potential Mobility Results o assessm	bility: mulative I: in Soil: of PBT and vPvB ient:	No data available. No data available. No data available.		ions				
2.3 2.4 2.5	Degradal Bioaccur Potential Mobility Results o assessm Other ad	bility: mulative I: in Soil: of PBT and vPvB ient:	No data available. No data available. No data available. No data available.	Considerat					
2.3 2.4 2.5 2.6	Degradal Bioaccur Potential Mobility Results o assessm Other ad	bility: mulative I: in Soil: of PBT and vPvB ent: verse effects:	No data available. No data available. No data available. No data available. Section 13. Disposal	Considerat	egulations.				
2.3 2.4 2.5 2.6	Degradal Bioaccur Potential Mobility Results o assessm Other ad	bility: mulative I: in Soil: of PBT and vPvB ent: verse effects:	No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo	Considerat	egulations.				
2.3 2.4 2.5 2.6 3.1	Degradal Bioaccur Potential Mobility Results of assessm Other ad Waste Di	bility: mulative I: in Soil: of PBT and vPvB eent: verse effects: isposal Method:	No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT):	Considerat	egulations.				
2.3 2.4 2.5 2.6 3.1 14.1 D	Degradal Bioaccur Potential Mobility Results of assessm Other ad Waste Di	bility: mulative l: in Soil: of PBT and vPvB ent: verse effects: isposal Method: RANSPORT (US I r Shipping Name:	No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT):	Considerat	egulations.				
2.3 2.4 2.5 2.6 3.1 14.1	Degradal Bioaccur Potential Mobility Results of assessm Other ad Waste Di LAND Th OT Proper	bility: mulative l: in Soil: of PBT and vPvB eent: verse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT):	Considerat	egulations.				
2.3 2.4 2.5 2.6 3.1 14.1	Degradal Bioaccur Potential Mobility Results of assessm Other ad Waste Di LAND TH OT Proper OT Hazaro N/NA Num	bility: mulative l: in Soil: of PBT and vPvB eent: verse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT): Not dangerous goods.	Considerat	egulations.				
2.3 2.4 2.5 2.6 3.1 14.1 D(U) 14.1	Degradal Bioaccur Potential Mobility Results of assessm Other ad Waste Di LAND TH OT Proper OT Hazaro N/NA Num	bility: mulative l: in Soil: of PBT and vPvB eent: verse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: nber:	No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT): Not dangerous goods.	Considerat	egulations.				
2.3 2.4 2.5 2.6 3.1 14.1 U 14.1 A	Degradal Bioaccur Potential Mobility Results of assessm Other ad Waste Di LAND TH OT Proper OT Hazaro N/NA Num	bility: mulative l: in Soil: of PBT and vPvB eent: verse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name:	No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT): Not dangerous goods.	Considerat	egulations.				
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<u> </u>	
Cauman	
Cayman	

14.3 AIR TRANSPORT (ICAO/IATA): ICAO/IATA Shipping Name: N

lame: Not dangerous goods.

Additional Transport

 $\label{eq:constraint} \ensuremath{\mathsf{Transport}}\xspace{1.5mm} \ensuremath{\mathsf{in}}\xspace{1.5mm} \ensuremath{\mathsf{cransport}}\xspace{1.5mm} \ensuremath{\mathsf{in}}\xspace{1.5mm} \ensuremath{\mathsf{cransport}}\xspace{1.5mm} \ensuremath{\mathsf{in}}\xspace{1.5mm} \ensuremath{\mathsf{in}}\xs$

Information:

Section 15. Regulatory Information

CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
NA	FLAC6		No	No	No	
CAS #	Hazardous Components (Chemical Name)		Other US EPA or	r State Lists	•	
NA	FLAC6		CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No			
Regulatory Ir Statement:	nformation	This SDS was prepared in acc No.1272/2008.	ordance with 29 CFF	R 1910.1200 and R	egulation (EC)	
		Section 16. Ot	her Informatio	on		
Revision Dat	e:	05/06/2018				
Additional In	formation 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.				