

Revision: 02/22/2020

Page: 1 of 6

		ng to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2015/83							
	Section 1.	Identification of the Substance/Mixture and of the	ne Company/Undertaking						
.1	Product Code:	29797							
	Product Name:	17(S)-HDHA-d5							
	Synonyms:	(S,4Z,7Z,10Z,13Z,15E,19Z)-17-hydroxydocos							
	acid; 17(S)-hydroxy Docosahexaenoic Acid-d5; 17(S)-HDoHE-d5;								
1.2	Relevant identified uses of the substance or mixture and uses advised against:								
	Relevant identified uses: For research use only, not for human or veterinary use.								
	Details of the Supplier of the Safety Data Sheet:								
	Company Name:	Cayman Chemical Company							
		1180 E. Ellsworth Rd.	1180 E. Ellsworth Rd.						
		Ann Arbor, MI 48108							
	Web site address:	www.caymanchem.com							
	Information:	Cayman Chemical Company	+1 (734)971-3335						
.4	Emergency telephone nu	mber:							
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300						
		CHEMTREC Outside USA and Canada:	+1 (703)527-3887						
		Section 2. Hazards Identific	ation						
.1	Classification of the Subs	stance or Mixture:							
	Flammable Liquids, Cat								
.2	Label Elements:								
	GHS Signal Word:	Danger							
	GHS Hazard Phrases:								
	H225: Highly flammable liquid and vapor.								
	GHS Precautionary Phrases:								
	P210: Keep away from {heat/sparks/open flames/hot surfaces} No smoking.								
	P280: Wear {protective gloves/protective clothing/eye protection/face protection}.								
	GHS Response Phrases P303+361+353: IF ON S water/shower.	KIN (or hair): Remove/take off immediately all conta	minated clothing. Rinse skin with						
	GHS Storage and Disposal Phrases:								
	Please refer to Section 7 for Storage and Section 13 for Disposal information.								
	UFI:								
.3	UFI: Adverse Human Health	Material may be irritating to the mucous membran	es and upper respiratory tract.						
2.3	Adverse Human Health	Material may be irritating to the mucous membran May be harmful by inhalation, ingestion, or skin ab							
2.3		May be harmful by inhalation, ingestion, or skin ab	psorption.						
2.3	Adverse Human Health	May be harmful by inhalation, ingestion, or skin ab May cause eye, skin, or respiratory system irritation	psorption.						
2.3	Adverse Human Health	May be harmful by inhalation, ingestion, or skin ab	psorption.						
2.3	Adverse Human Health	May be harmful by inhalation, ingestion, or skin ab May cause eye, skin, or respiratory system irritation	psorption.						
2.3	Adverse Human Health	May be harmful by inhalation, ingestion, or skin ab May cause eye, skin, or respiratory system irritation	psorption.						
2.3	Adverse Human Health	May be harmful by inhalation, ingestion, or skin ab May cause eye, skin, or respiratory system irritation	psorption.						



CAS # / RTECS #		Hazardous Comp REACH Registrat	oonents (Chemical Name)/ tion No.	Concentration	EC No./ EC Index No.	GHS Classification	
NA NA		17(S)-HDHA-d5		0.01 %	NA NA	No data available.	
64-17-5 Ethyl alcohol KQ6300000 01-2119457610-43-I		-	0000	99.99 %	200-578-6 603-002-00-5	Flam. Liq. 2: H225	
	·		Section 4. Fi	rst Aid Meas	ures	•	
4.1	Descript Measure	tion of First Aid					
	In Case	of Inhalation:	Remove to fresh air. If not br Get immediate medical atten		al respiration or giv	ve oxygen by trained personnel	
	In Case	of Skin Contact:	Immediately wash skin with s clothing. Get medical attention			5 minutes. Remove contaminate efore reuse.	
	In Case of Eye Contact: Hold eyelids apart and flush and tested by medical perso				water for at least 1	5 minutes. Have eyes examine	
	In Case	of Ingestion:	Wash out mouth with water p unconscious person. Get me medical personnel.	-	-	ive anything by mouth to an ng unless directed to do so by	
4.2							
			Section 5. Fire	Fighting Me	asures		
5.1	Suitable	Extinguishing	Use alcohol-resistant foam, o			spray.	
	Media: Use water spray to cool fire			exposed containers			
	Unsuital Media:	ble Extinguishing	A solid water stream may be	inefficient.			
5.2	Flamma	ble Properties an	dCan release vapors that forn	n explosive mixtures	s at temperatures a	at or above the flashpoint.	
	Hazards	:	Container explosion may occ		ions.		
			Emits toxic fumes under fire				
			Sensitive to static discharge.		b book		
			Vapors can travel to a source No data available.	e or ignition and has	STI DACK.		
	Flash Pt		14.00 C Method Used: Cl	osed Cup			
		/e Limits:	LEL: 3.3% at 25.0 C	-	6 at 25.0 C		
	Autoigni		363.00 C	0EE. 19.07	0 at 20.0 C		
5.3	-		:As in any fire, wear self-cont	ained breathing and	paratus pressure d	emand (NIOSH approved or	
5.5	rite rigi		equivalent), and full protectiv Note: Flammable as diluted	e gear to prevent c	-		



Revision: 02/22/2020

Section 6. Accidental Release Measures							
6.1 Protective Precautions, Avoid breathing vapors and provide adequate ventilation.							
Protective Equipment and	d As cor	nditions warrant, wear a	NIOSH approved self-contained breathing appara	tus, or respirator,			
Emergency Procedures:	and ap	propriate personal prot	ection (rubber boots, safety goggles, and heavy ru	bber gloves).			
Environmental Take steps to avoid release into the environment, if safe to do so.							
Precautions:							
6.3 Methods and Material For Contain spill and collect, as appropriate.							
Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations.							
Up:							
	S	Section 7. Hand	dling and Storage				
Precautions To Be Taken	Avoid b	preathing dust/fume/gas	s/mist/vapours/spray.				
in Handling:		•	-				
Keep away from sources of ignition.							
	-	-					
5							
	lion 8	. Exposure Co	ntrois/Personal Protection				
-		1 1.1.1.1.1.1					
				Notations			
-5 Ethyl alcohol		ACGIH ILV	TLV: 1000 ppm STEL: 1000 ppm				
		France VL	TWA: 1900 mg/m3 (1000 ppm)				
		OSHA PELS					
		Britain EH40					
STEL: ()							
2.2 Exposure Controls:							
-							
Engineering Controls			exhaust ventilation, or other engineering controls	to control airborne			
Engineering Controls (Ventilation etc.):	levels b	ocess enclosures, local pelow recommended ex	exhaust ventilation, or other engineering controls	to control airborne			
Engineering Controls (Ventilation etc.): Personal protection equi	levels t pment:	pelow recommended ex	exhaust ventilation, or other engineering controls	to control airborne			
Engineering Controls (Ventilation etc.): Personal protection equi Eye Protection:	levels t pment: Safety	pelow recommended ex glasses	exhaust ventilation, or other engineering controls posure limits.	to control airborne			
Engineering Controls (Ventilation etc.): Personal protection equin Eye Protection: Protective Gloves:	levels t pment: Safety Compa	pelow recommended ex glasses tible chemical-resistant	exhaust ventilation, or other engineering controls posure limits.	to control airborne			
Engineering Controls (Ventilation etc.): Personal protection equi Eye Protection: Protective Gloves: Other Protective Clothing	levels b pment: Safety Compa g:Lab coa	pelow recommended ex glasses itible chemical-resistant at	exhaust ventilation, or other engineering controls posure limits.	to control airborne			
Engineering Controls (Ventilation etc.): Personal protection equin Eye Protection: Protective Gloves: Other Protective Clothing Respiratory Equipment	levels b pment: Safety Compa g:Lab coa	pelow recommended ex glasses tible chemical-resistant	exhaust ventilation, or other engineering controls posure limits.	to control airborne			
Engineering Controls (Ventilation etc.): Personal protection equi Eye Protection: Protective Gloves: Other Protective Clothing Respiratory Equipment (Specify Type):	levels b pment: Safety Compa g:Lab coa NIOSH	pelow recommended ex glasses itible chemical-resistant at approved respirator, as	exhaust ventilation, or other engineering controls posure limits.	to control airborne			
Engineering Controls (Ventilation etc.): Personal protection equi Eye Protection: Protective Gloves: Other Protective Clothing Respiratory Equipment (Specify Type): Work/Hygienic/Maintenar	levels to pment: Safety Compa g:Lab coa NIOSH	pelow recommended ex glasses tible chemical-resistant at approved respirator, as take internally.	exhaust ventilation, or other engineering controls posure limits. gloves s conditions warrant.				
Engineering Controls (Ventilation etc.): Personal protection equi Eye Protection: Protective Gloves: Other Protective Clothing Respiratory Equipment (Specify Type):	levels t pment: Safety Compa g:Lab coa NIOSH n Do not Facilitie	pelow recommended ex glasses utible chemical-resistant at approved respirator, as take internally. es storing or utilizing thi	exhaust ventilation, or other engineering controls posure limits. gloves s conditions warrant. s material should be equipped with an eyewash ar				
Engineering Controls (Ventilation etc.): Personal protection equi Eye Protection: Protective Gloves: Other Protective Clothing Respiratory Equipment (Specify Type): Work/Hygienic/Maintenar	levels to pment: Safety Compa g:Lab coa NIOSH n Do not Facilitie Wash t	pelow recommended ex glasses tible chemical-resistant at approved respirator, as take internally.	exhaust ventilation, or other engineering controls posure limits. gloves s conditions warrant. s material should be equipped with an eyewash ar				
Engineering Controls (Ventilation etc.): Personal protection equi Eye Protection: Protective Gloves: Other Protective Clothing Respiratory Equipment (Specify Type): Work/Hygienic/Maintenar	levels to pment: Safety Compa g:Lab coa NIOSH n Do not Facilitie Wash t	pelow recommended ex glasses tible chemical-resistant at approved respirator, as take internally. es storing or utilizing this horoughly after handling	exhaust ventilation, or other engineering controls posure limits. gloves s conditions warrant. s material should be equipped with an eyewash ar				
Engineering Controls (Ventilation etc.): Personal protection equi Eye Protection: Protective Gloves: Other Protective Clothing Respiratory Equipment (Specify Type): Work/Hygienic/Maintenar	levels to pment: Safety Compa g:Lab coa NIOSH n Do not Facilitie Wash t	pelow recommended ex glasses tible chemical-resistant at approved respirator, as take internally. es storing or utilizing this horoughly after handling	exhaust ventilation, or other engineering controls posure limits. gloves s conditions warrant. s material should be equipped with an eyewash ar				
Engineering Controls (Ventilation etc.): Personal protection equi Eye Protection: Protective Gloves: Other Protective Clothing Respiratory Equipment (Specify Type): Work/Hygienic/Maintenar	levels to pment: Safety Compa g:Lab coa NIOSH n Do not Facilitie Wash t	pelow recommended ex glasses tible chemical-resistant at approved respirator, as take internally. es storing or utilizing this horoughly after handling	exhaust ventilation, or other engineering controls posure limits. gloves s conditions warrant. s material should be equipped with an eyewash ar				
Engineering Controls (Ventilation etc.): Personal protection equi Eye Protection: Protective Gloves: Other Protective Clothing Respiratory Equipment (Specify Type): Work/Hygienic/Maintenar	levels to pment: Safety Compa g:Lab coa NIOSH n Do not Facilitie Wash t	pelow recommended ex glasses tible chemical-resistant at approved respirator, as take internally. es storing or utilizing this horoughly after handling	exhaust ventilation, or other engineering controls posure limits. gloves s conditions warrant. s material should be equipped with an eyewash ar				
	Environmental Precautions: Methods and Material For Containment and Cleanin Up: Precautions To Be Taken in Handling: Precautions To Be Taken in Storing: Other Precautions:	Environmental Take s Precautions: Methods and Material For Contai Containment and Cleaning Transf Up: Precautions To Be Taken Avoid b in Handling: Avoid p Keep a Take p Precautions To Be Taken Keep a in Storing: Keep a in Storing: Keep a Store in Other Precautions: Hygros Exposure Parameters: Chemical Name	Environmental Take steps to avoid release in Precautions: Methods and Material For Contain spill and collect, as an Containment and Cleaning Transfer to a chemical waste Up: Section 7. Hand Precautions To Be Taken Avoid breathing dust/fume/gass in Handling: Avoid prolonged or repeated et Keep away from sources of ign Take precautionary measures Precautions To Be Taken Keep away from heat, sparks, in Storing: Keep container tightly closed. Store in accordance with inform Other Precautions: Hygroscopic Exposure Parameters: # Chemical Name Jurisdiction -5 Ethyl alcohol ACGIH TLV France VL OSHA PELs	Environmental Take steps to avoid release into the environment, if safe to do so. Precautions: Methods and Material For Contain spill and collect, as appropriate. Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regrup: Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. In Handling: Avoid prolonged or repeated exposure. Keep away from sources of ignition. Take precautionary measures against static discharge. Precautions To Be Taken Keep away from heat, sparks, and flame. In Storing: Keep container tightly closed. Store in accordance with information listed on the product insert. Other Precautions: Bygoscopic Section 8. Exposure Controls/Personal Protection Exposure Parameters: Jurisdiction Recommended Exposure Limits -5 Ethyl alcohol ACGIH TLV TLV: 1000 ppm STEL: 1000 ppm STEL: 9500 mg/m3 (1000 ppm) STEL: 9500 mg/m3 (1000 ppm) STEL: 9500 mg/m3 (1000 ppm) STEL: 9500 mg/m3 (1000 ppm) STEL: 9500 mg/m3 (1000 ppm)			



Page: 4 of 6

	ection 9. Physical and Chemical Properties					
Information on Basic Physical and Chemical Properties						
Physical States:	[]Gas [X]Liquid []Solid					
Appearance and Odor:	A solution in ethanol					
pH:	No data.					
Melting Point:	No data.					
Boiling Point:	No data.					
Flash Pt:	14.00 C Method Used: Closed Cup No data.					
Evaporation Rate:						
Flammability (solid, gas):	No data available.					
Explosive Limits:	LEL: 3.3% at 25.0 C UEL: 19.0% at 25.0 C					
Vapor Pressure (vs. Air o	r mm 43 MM_HG at 20.0 C					
Hg):						
Vapor Density (vs. Air = 1): No data.					
Specific Gravity (Water =	1): No data.					
Solubility in Water:	No data.					
Octanol/Water Partition	No data.					
Coefficient:						
Autoignition Pt:	363.00 C					
Decomposition Temperat	No data.					
Viscosity:	No data.					
Other Information						
Percent Volatile:	No data.					
Molecular Formula & Wei	ght: C22H27D5O3 349.5					
	Section 10. Stability and Reactivity					
Reactivity:	No data available.					
Stability:	Unstable [] Stable [X]					
Stability Note(s):	Stable if stored in accordance with information listed on the product insert.					
Polymerization:	Will occur [] Will not occur [X]					
Conditions To Avoid:	heat, flames, and sparks					
Incompatibility - Materials alkali metals						
To Avoid:	ammonia					
	peroxides					
strong oxidizing agents						
Hazardous	carbon dioxide					
Decomposition or	carbon monoxide					
Byproducts:						
	Melting Point: Boiling Point: Flash Pt: Evaporation Rate: Flammability (solid, gas): Explosive Limits: Vapor Pressure (vs. Air of Hg): Vapor Density (vs. Air = 1 Specific Gravity (Water = Solubility in Water: Octanol/Water Partition Coefficient: Autoignition Pt: Decomposition Temperat Viscosity: Other Information Percent Volatile: Molecular Formula & Weig Reactivity: Stability: Stability Note(s): Polymerization: Conditions To Avoid: Incompatibility - Materials To Avoid: Hazardous Decomposition or					



SAFETY DATA SHEET 17(S)-HDHA-d5

Revision: 02/22/2020

	Section 11. Toxicological Information									
11.1 Information on			The toxicological effects of this product have not been thoroughly studied.							
	Toxicological Effects:		Ethanol - Toxicity Data: Oral TDLO (man): 1.14 ml/kg; Oral TDLO (man): 650 mg/kg; Oral LD50							
			(rat): 7,060 mg/kg; Oral LD50 (mouse): 3,450 mg/kg; Oral LD50 (mouse): 10.5 ml/kg; Oral LD50 (rabbit): 6,300 mg/kg; Inhalation LC50 (rat): 20,000 ppm (10h); Inhalation TCLO (human): 1,800 ppm (30m); Inhalation TCLO (human): 2,500 mg/m3 (20m); Inhalation LC50 (rat): 5,900 mg/m3							
			(6h); Inhalai	ion LCLO (mouse): 29,300) ppm (7h);					
			Ethanol - Irritation Data: Eyes (rabbit): 500 mg (24h) mild; Skin (rabbit): 20 mg (24h) moderate; Ethanol - Investigated as a drug, mutagen, natural product, primary irritant, reproductive effector,							
	Chronic	: Toxicological								
	Effects:		and tumorigen. Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.							
			See actual entry in RTECS for complete information.							
			Ethanol RTECS Number: KQ6300000							
Carci	nogenicit	y:	NTP? No	IARC Monographs? No	OSHA Re	gulated? No				
CAS	#	Hazardous Com	ponents (Ch	emical Name)	NTP	IARC	ACGIH	OSHA		
	NA	17(S)-HDHA-d5			n.a.	n.a.	n.a.	n.a.		
64	64-17-5 Ethyl alcohol				n.a.	1	A4	n.a.		
			Sect	ion 12. Ecologica	I Informati	on				
12.1	Toxicity	/:	Avoid releas	se into the environment.						
			Runoff from fire control or dilution water may cause pollution.							
12.2	Persiste	ence and	No data available.							
	Degrada	ability:								
12.3	Bioaccu	umulative	No data ava	ilable.						
	Potentia	al:								
12.4	Mobility	/ in Soil:	No data available.							
12.5	Results	of PBT and vPvB	No data ava	o data available.						
	assessr	ment:								
12.6	Other a	dverse effects:	No data available.							
	Section 13. Disposal Considerations									
13.1	3.1 Waste Disposal Method: Disp			Dispose in accordance with local, state, and federal regulations.						
			Sec	tion 14. Transpor	t Informati	on				
14.1	LAND T	RANSPORT (US I	DOT):							
D	OT Prope	er Shipping Name:	Ethyl Al	cohol Solution						
D	DOT Hazard Class:		3	FLAMMABLE LIC	DID					
U	UN/NA Number:		UN1170)	Packing Grou	p:	II			
			FLOMMOBLE	LIQUE						
1.4.4										
14.1		RANSPORT (Euro	-	-						
		hipping Name:	-	Icohol Solution	Dealth C					
_	N Numbe		1170		Packing Grou	p:	II			
н	azard Cla	ISS:	3 - FLA	MMABLE LIQUID						
							-	A		
								Iulti-region format		



14.3 AIR TRANSPORT (ICAO/IATA): ICAO/IATA Shipping Name: Ethyl Alcohol Solution **UN Number:** 1170 Packing Group: Ш IATA Classification: Hazard Class: 3 - FLAMMABLE LIQUID 3 Additional Transport Transport in accordance with local, state, and federal regulations. Information: When sold in guantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity. Section 15. Regulatory Information EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI) NA 17(S)-HDHA-d5 No No No 64-17-5 Ethyl alcohol No No No CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA NA 17(S)-HDHA-d5 PROP.65: No CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes -64-17-5 Ethyl alcohol Inventory; CA PROP.65: No **Regulatory Information** This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008. Statement: Section 16. Other Information **Revision Date:** 02/22/2020 No data available. Additional Information About 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.