

	according to						
	Section 1. Ide	entification of the Substance/Mixture and of the	ne Company/Undertaking				
1	Product Code:	26570					
	Product Name:	Hexanoyl-L-carnitine-d3 (chloride)					
	Synonyms:	(R)-3-carboxy-2-(hexanoyloxy)-N,N-dimethyl-N	I-(methyl-d3)propan-1-aminium;				
		Caproyl-L-Carnitine-d3; C6 Carnitine-d3; L-He	xanoyl carnitine-d3;				
2	Relevant identified uses of the substance or mixture and uses advised against:						
	Relevant identified uses:	For research use only, not for human or veteri	nary use.				
3	Details of the Supplier of the Safety Data Sheet:						
-	Company Name:	Cayman Chemical Company					
		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 numb	er:					
	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				
2	Serious Eye Damage/Eye I Specific Target Organ Tox Label Elements:	Category 2 Irritation, Category 2 icity (single exposure), Category 3					
2	Specific Target Organ Tox	rritation, Category 2					
2	Specific Target Organ Tox Label Elements:	rritation, Category 2 icity (single exposure), Category 3					
2	Specific Target Organ Tox Label Elements: GHS Signal Word:	rritation, Category 2					
2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases:	rritation, Category 2 icity (single exposure), Category 3 Warning					
2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation.	Irritation, Category 2 icity (single exposure), Category 3 Warning					
2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye ir	rritation, Category 2 icity (single exposure), Category 3 Warning					
2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye in H335: May cause respiratory	rritation, Category 2 icity (single exposure), Category 3 Warning					
2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye in H335: May cause respiratory GHS Precaution Phrases:	rritation, Category 2 icity (single exposure), Category 3 Warning rritation. y irritation.					
2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye in H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dust	rritation, Category 2 icity (single exposure), Category 3 Warning rritation. y irritation.					
2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye in H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug	rritation, Category 2 icity (single exposure), Category 3 Warning rritation. y irritation. /fume/gas/mist/vapors/spray}. ghly after handling.	on}.				
2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye in H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug P280: Wear {protective glove	rritation, Category 2 icity (single exposure), Category 3 Warning rritation. y irritation.	on}.				
2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye in H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dust. P264: Wash {hands} thoroug P280: Wear {protective glove GHS Response Phrases:	rritation, Category 2 icity (single exposure), Category 3 Warning rritation. y irritation. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protection	on}.				
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2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye in H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dust P264: Wash {hands} thoroug P280: Wear {protective glove GHS Response Phrases: P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Re	rritation, Category 2 icity (single exposure), Category 3 Warning warning rritation. y irritation. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protection sh with plenty of soap and water. move victim to fresh air and keep at rest in a pos	ition comfortable for breathing.				
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2	Specific Target Organ Tox Label Elements: GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritation. H319: Causes serious eye in H335: May cause respiratory GHS Precaution Phrases: P261: Avoid breathing {dust. P264: Wash {hands} thoroug P280: Wear {protective glov. GHS Response Phrases: P302+352: IF ON SKIN: Wa P304+340: IF INHALED: Re P305+351+338: IF IN EYES to do. Continue rinsing. P312: Call a POISON CENT	Irritation, Category 2 icity (single exposure), Category 3 Warning Warning rritation. y irritation. /fume/gas/mist/vapors/spray}. ghly after handling. es/protective clothing/eye protection/face protection sh with plenty of soap and water. move victim to fresh air and keep at rest in a pos at Rinse cautiously with water for several minutes TER or doctor/physician if you feel unwell.	ition comfortable for breathing.				
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2.3		se Human Health s and Symptoms:	_	the mucous membr n, ingestion, or skin m irritation. e, the toxicological	absorption.	t been thoroughly investigated.		
		Sect	tion 3. Composition	/Information	on Ingredie	ents		
CAS # / Hazardous Comp RTECS # REACH Registrat		-	oonents (Chemical Name)/ tion No.	Concentration	EC No./ EC Index No.	GHS Classification		
NA NA		Hexanoyl-L-carnitine	e-d3 (chloride)	100.0 %	NA NA	Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336		
		4	Section 4. Fi	rst Aid Meas	sures	+		
4.1	Measu	ption of First Aid res: e of Inhalation:	Remove to fresh air. If not bro	eathing, give artific	ial respiration or gi	ve oxygen by trained personnel.		
			Get immediate medical atten Immediately wash skin with s	tion. soap and plenty of v	water for at least 1	5 minutes. Remove contaminated		
	clothing. Get medical attention if symptoms occur. Wash clothingIn Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 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 Me	easures			
5.1	Suitable ExtinguishingUse alcohol-resistant foam,Media:Use water spray to cool fireUnsuitable ExtinguishingA solid water stream may b			exposed containers		l spray.		
5.2	Media: Flamm Hazard	able Properties an	d No data available.					
			No data available.					
	Flash I		No data.	I 1 17 1 . KI-	data			
	•	ve Limits:	LEL: No data. No data.	UEL: No o	uala.			
5.3	Autoignition Pt: No data. 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.							
				<u> </u>				



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		Section 6. Accidental Release Measures				
6.1	Protective Precautions,	Avoid breathing vapors and provide adequate ventilation.				
	Protective Equipment and	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	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:					
		Section 7. Handling and Storage				
7.1	Precautions To Be Taken	Avoid breathing dust/fume/gas/mist/vapours/spray.				
	in Handling:	Avoid prolonged or repeated exposure.				
7.2	Precautions To Be Taken	Keep container tightly closed.				
	in Storing:	Store in accordance with information listed on the product insert.				
	Secti	on 8. Exposure Controls/Personal Protection				
8.1	Exposure Parameters:					
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:	Lab coat				
	Respiratory Equipment	NIOSH approved respirator, as conditions warrant.				
	(Specify Type):					
	Work/Hygienic/Maintenan	Do not take internally.				
	ce Practices:	acilities storing or utilizing this material should be equipped with an eyewash and a safety shower.				
		Wash thoroughly after handling.				
		No data available.				
	Se	ction 9. Physical and Chemical Properties				
9.1	Information on Basic Physi	cal and Chemical Properties				
	Physical States:	[]Gas []Liquid [X]Solid				
	Appearance and Odor:	A 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.				
		Multi-region format				



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1	Specific Gravity (Water =	1): N	o data.					
	Solubility in Water:	No data.						
	Solubility Notes:	~2	~20 mg/ml in EtOH & DMF; ~10 mg/ml in DMSO; No data.					
	Octanol/Water Partition	N						
	Coefficient:							
	Autoignition Pt:	N	o data.					
	Decomposition Temperat	ure: N	o data.					
	Viscosity:		o data.					
9.2	Other Information							
	Percent Volatile:	N	o data.					
	Molecular Formula & Weig		13H23D3NO4 • Cl 298.8					
		-	ction 10. Stability and	Reactivit	V			
	Desetivity		-	Reactivit	у			
10.1 10.2	Reactivity:	No data a						
	Stability:	Unstable		برم المنعم المريد	he such that is a			
10.3	Stability Note(s):		stored in accordance with informa		ne product in:	Sert.		
	Polymerization:	Will occu						
10.4	Conditions To Avoid:	No data a						
10.5	Incompatibility - Materials	strong ox	idizing agents					
	To Avoid:							
10.6	Hazardous	carbon di						
	Decomposition or	carbon monoxide hydrogen chloride						
	Byproducts:							
		nitrogen oxides						
		Sect	ion 11. Toxicological	Informati	on			
11.1	11.1 Information on		The toxicological effects of this product have not been thoroughly studied.					
	Toxicological Effects:							
Carcir	nogenicity:	NTP? No	IARC Monographs? No	OSHA Regu	lated? No			
CAS	# Hazardous Com	nonente (Chemical Name)	NTP	IARC	ACGIH	OSHA	
		ponents (
1	NA Hexanoyl-L-carnit	-	-	n.a.	n.a.	n.a.	n.a.	
		tine-d3 (ch	loride)			n.a.	n.a.	
	NA Hexanoyl-L-carnit	tine-d3 (ch	loride) ction 12. Ecological Ir			n.a.	n.a.	
12.1		tine-d3 (ch Se Avoid rele	loride) ction 12. Ecological Ir ease into the environment.	formation	<u>.</u> ו	n.a.	n.a.	
	NA Hexanoyl-L-carnit	tine-d3 (ch Se Avoid rele Runoff fro	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m	formation	<u>.</u> ו	n.a.	n.a.	
12.1 12.2	NA Hexanoyl-L-carnit	tine-d3 (ch Se Avoid rele	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m	formation	<u>.</u> ו	n.a.	n.a.	
12.2	NA Hexanoyl-L-carnit Toxicity: Persistence and Degradability:	kine-d3 (ch Se Avoid rele Runoff fro No data a	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m available.	formation	<u>.</u> ו	n.a.	n.a.	
	NA Hexanoyl-L-carnit Toxicity: Persistence and Degradability: Bioaccumulative	tine-d3 (ch Se Avoid rele Runoff fro	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m available.	formation	<u>.</u> ו	n.a.	n.a.	
12.2 12.3	NA Hexanoyl-L-carnit Toxicity: Persistence and Degradability: Bioaccumulative Potential:	kine-d3 (ch Se Avoid rele Runoff fro No data a No data a	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m available. available.	formation	<u>.</u> ו	n.a.	n.a.	
12.2	NA Hexanoyl-L-carnit Toxicity: Persistence and Degradability: Bioaccumulative Potential: Mobility in Soil:	tine-d3 (ch Se Avoid rele Runoff fro No data a No data a	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m available. available.	formation	<u>.</u> ו	n.a.	n.a.	
12.2 12.3	NA Hexanoyl-L-carnit Toxicity: Persistence and Degradability: Bioaccumulative Potential:	tine-d3 (ch Se Avoid rele Runoff fro No data a No data a	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m available. available.	formation	<u>.</u> ו	n.a.	n.a.	
12.2 12.3 12.4	NA Hexanoyl-L-carnit Toxicity: Persistence and Degradability: Bioaccumulative Potential: Mobility in Soil:	tine-d3 (ch Se Avoid rele Runoff fro No data a No data a	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m available. available.	formation	<u>.</u> ו	n.a.	n.a.	
12.2 12.3 12.4	NA Hexanoyl-L-carnit Toxicity: Persistence and Degradability: Bioaccumulative Potential: Mobility in Soil: Results of PBT and vPvB	tine-d3 (ch Se Avoid rele Runoff fro No data a No data a	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m available. available. available. available.	formation	<u>.</u> ו	n.a.	n.a.	
12.2 12.3 12.4 12.5	NA Hexanoyl-L-carnit Toxicity: Persistence and Degradability: Bioaccumulative Potential: Mobility in Soil: Results of PBT and vPvB assessment:	tine-d3 (ch Avoid rele Runoff fro No data a No data a No data a	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m available. available. available. available.	formation	<u>.</u> ו	n.a.	n.a.	
12.2 12.3 12.4 12.5	NA Hexanoyl-L-carnit Toxicity: Persistence and Degradability: Bioaccumulative Potential: Mobility in Soil: Results of PBT and vPvB assessment:	tine-d3 (ch Avoid rele Runoff fro No data a No data a No data a	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m available. available. available. available.	formation	<u>.</u> ו	n.a.	n.a.	
12.2 12.3 12.4 12.5	NA Hexanoyl-L-carnit Toxicity: Persistence and Degradability: Bioaccumulative Potential: Mobility in Soil: Results of PBT and vPvB assessment:	tine-d3 (ch Avoid rele Runoff fro No data a No data a No data a	loride) ction 12. Ecological Ir ease into the environment. om fire control or dilution water m available. available. available. available.	formation	<u>.</u> ו	n.a.	n.a.	



Multi-region format

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		Section 13. Dispos				
13.1 Waste	Disposal Method:	Dispose in accordance with loca	al, state, and federal r	egulations.		
		Section 14. Tran	sport Informat	ion		
14.1 LAND	TRANSPORT (US	DOT):				
DOT Prop	er Shipping Name	: Not dangerous goods.				
DOT Haza						
UN/NA Nu						
	TRANSPORT (Eur					
	Shipping Name: er:	Not dangerous goods.				
Hazard Cl						
14.3 AIR TR	ANSPORT (ICAO/	ΊΑΤΑ):				
ICAO/IAT/	A Shipping Name:	Not dangerous goods.				
Additional Tra	ansport	Transport in accordance with lo	ocal, state, and federa	l regulations.		
Information:						
		Section 15. Regul	latory Information	tion		
EPA SARA (S	uperfund Amendn	nents and Reauthorization Act	of 1986) Lists			
CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
NA	Hexanoyl-L-carn	itine-d3 (chloride)	No	No	No	
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or §	State Lists		
NA	Hexanoyl-L-carn	itine-d3 (chloride)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No			
Regulatory Inf	ormation	This SDS was prepared in acco	ordance with 29 CFR ²	1910.1200 and Regul	ation (EC)	
Statement:		No.1272/2008.				
		Section 16. Oth	ner Information	า		
Revision Date	:	12/15/2018				
Additional Info	ormation 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. Howev express or implied, with respect use. Users should make their o				-		
		their particular purposes.	U U			