

Revision: 02/09/2017 Supersedes Revision: 08/06/2013

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008							
		Section 1. Ide	ntification of the Substan	nce/Mixture and of t	he Company/Ur	ndertaking	
1.1	Product Code: 700804 Product Name: ALDH Cofactor						
1.2	Relevan	t identified uses of th	e substance or mixture a	ind uses advised ag	gainst:		
	Releva	int identified uses:	For research use only, no	ot for human or veteri	inary use.		
1.3	Details o	of the Supplier of the	Safety Data Sheet:				
	Compa	any Name:	Cayman Chemical Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	any			
	Web s	ite address:	www.caymanchem.com				
	Inform	ation:	Cayman Chemical Comp	any	+1 (734	4)971-3335	
1.4	-	ncy telephone numbe ency Contact:	er: CHEMTREC Within USA CHEMTREC Outside US			0)424-9300 3)527-3887	
			Section 2. Haz	zards Identific	cation		
2.1	Classific	cation of the Substan	ce or Mixture:				
2.2	Label El	ements:					
	GHS S	ignal Word:	None				
		lazard Phrases:					
			ntly available data this sub	stance or mixture is r	not classifiable ac	cording to GHS.	
		Precaution Phrases:					
	•	ases apply. Response Phrases:					
		ases apply.					
	-	Storage and Disposal	Phrases:				
			Storage and Section 13 for	Disposal information	۱.		
2.3	Adverse	e Human Health Ma	aterial may be irritating to the	he mucous membran	nes and upper res	piratory tract.	
	Effects		ay be harmful by inhalation		bsorption.		
			ay cause eye, skin, and res			han a than a she had a start a d	
<u> </u>						been thoroughly investigated.	
		Section	n 3. Composition	/information c	on ingredier		
CAS RTE	#/ CS#	Hazardous Compone REACH Registration	ents (Chemical Name)/ No.	Concentration	EC No./ EC Index No.	GHS Classification	
	-84-9 50000	NAD+		100.0 %	200-184-4 NA	No data available.	



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Measures: In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained per Get immediate medical attention. In Case of Skin Contact: Immediately wash skin with soap and plenty of water for at least 20 minutes. Remove conta clothing. Get medical attention if symptoms occur. Wash dothing before reuse. In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes or and tested by medical personnel. In Case of Ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do medical personnel. In Case of Ingestion: Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Media: Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Media: Use water spray to cool fire-exposed containers. Unsuitable Extinguishing A solid water stream may be inefficient. Media: No data available. 18 animable Properties andNo data available. Hatards: No data available. Flash Pt: No data. 24 Explosive Limits: LEL: No data. ULE: No data. 33 Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approve equivalent), and full protective gear to provide adequate venillation.			
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6.2 Environmental Take steps to avoid release into the environment, if safe to do so. Precautions: 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. Section 8. Exposure Controls/Personal Protection		Protective Equipment and	As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,
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7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection	7.1	Precautions To Be Taken	Avoid breathing dust/fume/gas/mist/vapours/spray.
in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection		in Handling:	Avoid prolonged or repeated exposure.
Section 8. Exposure Controls/Personal Protection	7.2	Precautions To Be Taken	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		· · ·

Multi-region format



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 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.						
		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 Physi	ical and Chemical Properties					
	Physical States:	[]Gas []Liquid [X]Solid					
	Appearance and Odor:	A lyophilized 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	mm No data.					
	Hg):						
	Vapor Density (vs. Air = 1)	: No data.					
	Specific Gravity (Water = 1						
	Solubility in Water:	No data.					
	Solubility Notes:	Soluble in: water;					
	Octanol/Water Partition	No data.					
	Coefficient:						
	Autoignition Pt:	No data.					
	Decomposition Temperatu						
	Viscosity:	No data.					
9.2	Other Information						
	Percent Volatile:	No data.					
1							



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C H I	MICAL				Si	upersedes Revis	ion: 08/06/2013		
			Section 10. Stability and	l Reacti	vity				
10.1 R	Reactivity:		No data available.						
0.2 S	Stability:		Unstable [] Stable [X]						
0.3 S	Stability No	te(s):	Stable if stored in accordance with inform	ation listed	on the product	insert.			
Р	Polymerizat	ion:	Will occur [] Will not occur [X]						
10.4 C	Conditions	To Avoid:	No data available.						
10.5 Ir	ncompatibi	lity - Materials	s strong oxidizing agents						
т	o Avoid:								
10.6 H	lazardous		carbon dioxide						
D	Decomposit	ion or	carbon monoxide						
В	Byproducts:		nitrogen oxides						
			Section 11. Toxicological	Informa	ation				
11.1 Ir	nformation	on	The toxicological effects of this product ha	ave not bee	n thoroughly st	udied.			
т	Toxicologic	al Effects:	NAD+ - Toxicity Data: Intraperitoneal LD5	0 (mouse):	4333 mg/kg;				
С	Chronic To	cicological	NAD+ - Investigated as a mutagen.						
E	Effects:		Only select Registry of Toxic Effects of Cl	nemical Sub	ostances (RTE	CS) data is pre	sented here.		
			See actual entry in RTECS for complete in	nformation.					
			NAD+ RTECS Number: UU3450000						
CAS #	На	zardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA		
53-84	4-9 NA	\D+		n.a.	n.a.	n.a.	n.a.		
			Section 12. Ecological I	nformat	tion				
12.1 T	oxicity:		Avoid release into the environment.						
12.1 1	exicity.		Runoff from fire control or dilution water may cause pollution.						
12.2 P	Persistence	and	No data available.	,					
	Degradabili								
	Bioaccumul		No data available.						
	Potential:	alive							
	Aobility in S	Soil	No data available.						
	-								
			No data available.						
	issessment								
12.6 O	Other adver	se effects:	No data available.						
			Section 13. Disposal Cor						
13.1 W	Vaste Disp	osal Method:	Dispose in accordance with local, state, a		-				
			Section 14. Transport I	nformat	tion				
14.1 L	LAND TRAI	NSPORT (US [DOT):						
DOT	T Proper Sh	hipping Name:	Not dangerous goods.						
DOT	T Hazard Cl	ass:							
UN/I	NA Numbe	r:							
14.1 L	LAND TRAI	NSPORT (Euro	opean ADR/RID):						
ADR	R/RID Shipp	oing Name:	Not dangerous goods.						
UN I	Number:								
Haz	ard Class:								
1102									
Title									

4
Calman
Caynan

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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)	
53-84-9	NAD+		No	No	No	
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or	State Lists	•	
53-84-9	NAD+	NAD+		CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No		
Regulatory In Statement:	formation	This SDS was prepared in acco No.1272/2008.	ordance with 29 CFR	1910.1200 and R	egulation (EC)	
		Section 16. Oth	ner Informatio	n		
Revision Date:		02/09/2017				
Additional Information 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.				