

Revision: 07/19/2017 Supersedes Revision: 05/08/2017

	accord	ing to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008					
	Section 1. Ide	ntification of the Substance/Mixture and of th	ne Company/Undertaking					
.1	Product Code:	21473						
	Product Name:	AHU377 (calcium salt)						
	Synonyms:	(.alpha.R,.gamma.S)gamma[(3-carboxy-1-o						
		entanoic acid, 4-ethyl ester, hemicalcium salt;	Sacubitril;					
.2	Relevant identified uses of the	ne substance or mixture and uses advised aga	ainst:					
	Relevant identified uses:	For research use only, not for human or vetering	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 number	er:						
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300					
		CHEMTREC Outside USA and Canada:	+1 (703)527-3887					
		Section 2. Hazards Identifica	ation					
.2	Acute Toxicity: Oral, Categ Aquatic Toxicity (Acute), C Label Elements:	-						
.2	Aquatic Toxicity (Acute), C Label Elements:	ategory 1						
2.2	Aquatic Toxicity (Acute), C Label Elements: GHS Signal Word:	-						
.2	Aquatic Toxicity (Acute), C Label Elements: GHS Signal Word: GHS Hazard Phrases:	ategory 1						
.2	Aquatic Toxicity (Acute), C Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed.	ategory 1 Danger						
.2	Aquatic Toxicity (Acute), C Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic li	ategory 1 Danger						
2	Aquatic Toxicity (Acute), C Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic lit GHS Precaution Phrases:	ategory 1 Danger fe.						
2	Aquatic Toxicity (Acute), C Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic li	Danger fe.						
2	Aquatic Toxicity (Acute), C Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic li GHS Precaution Phrases: P264: Wash {hands} thoroug	Danger fe.						
2	Aquatic Toxicity (Acute), C Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic li GHS Precaution Phrases: P264: Wash {hands} thoroug P273: Avoid release to the e GHS Response Phrases:	Danger fe.	/physician.					
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2	Aquatic Toxicity (Acute), C Label Elements:	ategory 1 Danger fe. yhly after handling. nvironment. :: Immediately call a POISON CENTER or doctor	/physician.					
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4
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Revision: 07/19/2017

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2.3		e Human Health and Symptoms:	Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp Toxic if swallowed.	or skin absorption.	nes and upper res			
			_		-	t been thoroughly investigated.		
		Sec	tion 3. Composition	/Information d	on Ingredie	nts		
	CAS # / Hazardous Comp RTECS # REACH Registrat			Concentration	EC No./ EC Index No.	GHS Classification		
13697 NA	73-39-6	AHU377 (calcium sa	alt)	100.0 %	NA NA	Acute Tox.(O) 3: H301 Aquatic (A) 1: H400		
			Section 4. Fi	rst Aid Measu	ires			
4.1	Measu	otion of First Aid res: e of Inhalation:	Remove to fresh air. If not broch		respiration or giv	ve oxygen by trained personnel.		
	In Case	e 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.					
		e of Eye Contact:	Hold eyelids apart and flush of and tested by medical person		ater for at least 1	5 minutes. Have eyes examine		
In Case of Ingestion:		e 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 Mea	asures			
5.1	Suitabl Media:	e Extinguishing	Use alcohol-resistant foam, o Use water spray to cool fire-o		, or dry chemical	spray.		
	Unsuita Media:	able Extinguishing	A solid water stream may be	inefficient.				
5.2		Flammable Properties andNo data available. Hazards:						
			No data available.					
	Flash F		No data.					
	-	ive Limits:	LEL: No data.	UEL: No da	ta.			
5.3	-	nition Pt: ghting Instructions	No data. S: As in any fire, wear self-cont equivalent), and full protectiv		-			
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Revi	sion: 07	7/19/2017
Supersedes Revis	sion: 0	5/08/2017

	HEMICAL	Supersedes Revision: 05/08/2017
	S	Section 6. Accidental Release Measures
6.1	Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation.
		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.
	Section	on 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	
8.2	Exposure Controls:	
8.2.1	Engineering Controls	Jse process enclosures, local exhaust ventilation, or other engineering controls to control airborne
	(Ventilation etc.):	evels below recommended exposure limits.
8.2.2	Personal protection equipr	nent:
	Eye Protection:	Safety glasses
	Protective Gloves:	Compatible chemical-resistant gloves
	Other Protective Clothing:	_ab coat
	Respiratory Equipment	NIOSH approved respirator, as conditions warrant.
	(Specify Type):	
	Work/Hygienic/Maintenan	
		Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.
		Nash thoroughly after handling.
		No data available.
	Se	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 Dopsity (vs. Air – 1):	No data.
	Vapor Density (vs. Air = 1):	ino dala.
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Page: 4 of 6

	-	Gravity (Water =)	1):	No data.					
	Solubilit	y in Water:		No data.					
	Solubilit	y Notes:		-	n a 1:3 solution of [DMSO:PBS	(pH 7.2); ~5 m	g/ml in EtOH; ~	-20 mg/ml in
				DMSO & DMF	;				
	Octanol/	Water Partition		No data.					
	Coefficie	ent:							
	Autoigni	tion Pt:		No data.					
	Decomp	osition Temperate	ure:	No data.					
	Viscosity	/:		No data.					
9.2	Other Inf	ormation							
	Percent	Volatile:		No data.					
	Molecula	r Formula & Weig	ght:	C24H28NO5 •	1/2Ca 411.2				
			S	ection 10.	Stability and	d Reacti	vity		
10.1	Reactivit	y:	No dat	ta available.	-		-		
10.2	Stability	:	Unstat	ole [] Stat	ole [X]				
10.3	Stability	Note(s):	Stable	if stored in acc	ordance with inform	nation listed	on the product	insert.	
	Polymer	ization:	Will oc	cur[] Wil	I not occur [X]				
10.4	Conditio	ns To Avoid:	No dat	ta available.					
10.5	Incompa	tibility - Materials	strong	oxidizing agent	ts				
	To Avoid	l:							
10.6	Hazardo	us	calciur	n oxides					
	Decomp	osition or	carbor	n dioxide					
	Byprodu		carbor	n monoxide					
			nitroge	en oxides					
			Se	ction 11.	Toxicologica	Inform	ation		
11.1	Informat	ion on			cts of this product h			udied	
		gical Effects:					in alloroughly of	aalea.	
				(0)					
CAS #		Hazardous Com		s (Chemical Na	ame)	NTP	IARC	ACGIH	OSHA
13697	73-39-6	AHU377 (calcium	salt)			n.a.	n.a.	n.a.	n.a.
			S	Section 12	. Ecological l	Information	tion		
12.1	Toxicity:			release into the					
					ol or dilution water r	nay cause p	onution.		
12.2	Persiste		No dat	ta available.					
	Degrada	-							
12.3	Bioaccu		No dat	ta available.					
	Potentia	:							
12.4	Mobility	in Soil:	No dat	ta available.					
12.5	Results	of PBT and vPvB	No dat	ta available.					
	assessm	ent:							
12.6	Other ad	verse effects:	No dat	ata available.					



Revision: 07/19/2017 Supersedes Revision: 05/08/2017

14.1 LAND TRAN DOT Proper Shi DOT Hazard Cla UN/NA Number: ADR/RID Shippi UN Number: Hazard Class:	SPORT (US DOT): oping Name: T y ss: 6 U SPORT (European ng Name: T (4 a 2	se in accordance with Section 14. Tr oxic solids, organic, n Jamino]-4-oxobutanoid 1 POISC N2811 POISC ADR/RID): oxic solids, organic, n	c acid calcium salt) DN Packing Gro	regulations. tion y-4-methyl-5-oxo- up:	1-(4-phenylphenyl)pentan-2 III		
14.1 LAND TRAN DOT Proper Shi DOT Hazard Cla UN/NA Number: ADR/RID Shippi UN Number: Hazard Class: 14.3 AIR TRANSF	SPORT (US DOT): oping Name: T y ss: 6 U SPORT (European ng Name: T (4 a 2	Section 14. Tr oxic solids, organic, n.]amino]-4-oxobutanoid .1 POISC N2811 N2811 ADR/RID): oxic solids, organic, n I-[[(2S,4R)-5-Ethoxy-4 cid calcium salt)	ansport Informa o.s. (4-[[(2S,4R)-5-Ethox c acid calcium salt) DN Packing Gro	tion y-4-methyl-5-oxo- up:	III		
DOT Proper Shi DOT Hazard Cla UN/NA Number: 14.1 LAND TRAN ADR/RID Shippi UN Number: Hazard Class: 14.3 AIR TRANSF	SPORT (US DOT): oping Name: T y ss: 6 U SPORT (European ng Name: T (4 a 2	oxic solids, organic, n]amino]-4-oxobutanoid .1 POISC N2811 N2811 ADR/RID): oxic solids, organic, n I-[[(2S,4R)-5-Ethoxy-4 cid calcium salt)	o.s. (4-[[(2S,4R)-5-Ethox c acid calcium salt) DN Packing Gro .o.s.	y-4-methyl-5-oxo- u p:	III		
DOT Proper Shi DOT Hazard Cla UN/NA Number: 14.1 LAND TRAN ADR/RID Shippi UN Number: Hazard Class: 14.3 AIR TRANSF	SPORT (European ng Name: T (4 a 2	Jamino]-4-oxobutanoid 1 POISC N2811 POISC N2811 ADR/RID): oxic solids, organic, n I-[[(2S,4R)-5-Ethoxy-4 cid calcium salt)	c acid calcium salt) DN Packing Gro	up:	III		
DOT Hazard Cla UN/NA Number: 14.1 LAND TRAN ADR/RID Shippi UN Number: Hazard Class: 14.3 AIR TRANSF	y ss: 6 GPORT (European ng Name: T (4 ع 2	Jamino]-4-oxobutanoid 1 POISC N2811 POISC N2811 ADR/RID): oxic solids, organic, n I-[[(2S,4R)-5-Ethoxy-4 cid calcium salt)	c acid calcium salt) DN Packing Gro	up:	III		
UN/NA Number: 14.1 LAND TRAN ADR/RID Shippi UN Number: Hazard Class: 14.3 AIR TRANSF	SPORT (European ng Name: T (4 a 2	N2811 POISON 6 ADR/RID): oxic solids, organic, n I-[[(2S,4R)-5-Ethoxy-4 cid calcium salt)	Packing Gro				
14.1 LAND TRAN ADR/RID Shippi UN Number: Hazard Class: 14.3 AIR TRANSF	SPORT (European ng Name: T (4 a 2	POISON 6 ADR/RID): oxic solids, organic, n I-[[(2S,4R)-5-Ethoxy-4 cid calcium salt)	.0.S.				
ADR/RID Shippi UN Number: Hazard Class: 14.3 AIR TRANSF	ng Name: T (4 a 2	oxic solids, organic, n I-[[(2S,4R)-5-Ethoxy-4 cid calcium salt)		ylphenyl)pentan-2	-yl]amino]-4-oxobutanoic		
ADR/RID Shippi UN Number: Hazard Class: 14.3 AIR TRANSF	ng Name: T (4 a 2	oxic solids, organic, n I-[[(2S,4R)-5-Ethoxy-4 cid calcium salt)		ylphenyl)pentan-2	-yl]amino]-4-oxobutanoic		
UN Number: Hazard Class: 14.3 AIR TRANSF	(4 a 2	l-[[(2S,4R)-5-Ethoxy-4 cid calcium salt)		ylphenyl)pentan-2	-yl]amino]-4-oxobutanoic		
Hazard Class: 14.3 AIR TRANSF		811					
14.3 AIR TRANSF	6		Packing Gro	up:	III		
		.1 - POISON					
ICAO/IATA Ship	ORT (ICAO/IATA):						
	(4	oxic solids, organic, n I-[[(2S,4R)-5-Ethoxy-4 cid calcium salt)		ylphenyl)pentan-2	-yl]amino]-4-oxobutanoic		
UN Number:	2	811	Packing Group:		III		
Hazard Class:	6	.1 - POISON	IATA Classif	IATA Classification:			
Additional Transpo Information:	Wher E1, E	n sold in quantities of l 2, E4, or E5, this item	th local, state, and federa ess than or equal to 1 mL meets the De Minimis Q not have to be labeled as	., or 1 g, with an E uantities exemptio	•		
	S	Section 15. Re	gulatory Informa	tion			
EPA SARA (Superfu	Ind Amendments a	nd Reauthorization	Act of 1986) Lists				
CAS # Haz	ardous Componen	ts (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)		
1369773-39-6 AHU	I377 (calcium salt)		No	No	No		
CAS # Haz	ardous Componen	ts (Chemical Name)	Other US EPA or	Other US EPA or State Lists			
1369773-39-6 AHU377 (calcium salt)			CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No				

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Revision: 07/19/2017

Cayman	Revision: 07/19/2017 Supersedes Revision: 05/08/2017
Regulatory Information Statement:	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.
	Section 16. Other Information
Revision Date:	07/19/2017
Additional Information About This Product:	No data available.
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.