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	accordi	ng to Regulation (EC) No. 1907/2006 as amonded by (EC) No. 2015/02/	0 and US OSHA HCS 2015				
		ng to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2015/83					
	Section 1.	Identification of the Substance/Mixture and of th	ne Company/Undertaking				
1.1	Product Code: Product Name: Synonyms:	27566 Dipeptide diaminobutyroyl benzylamide (acetate) (2S)betaalanyl-L-prolyl-2,4-diamino-N-(phenylmethyl)-butanamide, diacetate; HbetaAla-Pro-Dab-NH-benzyl; HbetaAla-Pro-DabNHBz;					
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 veterir	nary use.				
1.3	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				
1.4	Emergency telephone nui	nber:					
	Emergency Contact:	CHEMTREC Within USA and Canada: CHEMTREC Outside USA and Canada:	+1 (800)424-9300 +1 (703)527-3887				
		Section 2. Hazards Identifica	ation				
2.1	Classification of the Subs	tance or Mixture:					
	Acute Toxicity: Skin, Ca	ategory 3					
2.2	Label Elements:						
	GHS Signal Word: GHS Hazard Phrases:	Danger					
	H311: Toxic in contact wi	th skin.					
	GHS Precaution Phrases:						
	GHS Precaution Phrase	S:					
		s: loves/protective clothing/eye protection/face protectio	on}.				
		loves/protective clothing/eye protection/face protection	on}.				
	P280: Wear {protective g GHS Response Phrases	loves/protective clothing/eye protection/face protection	on}.				
	P280: Wear {protective g GHS Response Phrases P302+352: IF ON SKIN: \	loves/protective clothing/eye protection/face protectio	on}.				
	P280: Wear {protective g GHS Response Phrases P302+352: IF ON SKIN: \ P312: Call a POISON CE P361: Remove/Take off in	loves/protective clothing/eye protection/face protection Wash with plenty of soap and water. NTER or doctor/physician if you feel unwell. mmediately all contaminated clothing.	on}.				
	P280: Wear {protective g GHS Response Phrases P302+352: IF ON SKIN: V P312: Call a POISON CE P361: Remove/Take off in P363: Wash contaminate	loves/protective clothing/eye protection/face protection Wash with plenty of soap and water. NTER or doctor/physician if you feel unwell. mmediately all contaminated clothing. d clothing before reuse.	on}.				
	P280: Wear {protective g GHS Response Phrases P302+352: IF ON SKIN: V P312: Call a POISON CE P361: Remove/Take off in P363: Wash contaminate GHS Storage and Dispo	loves/protective clothing/eye protection/face protection Wash with plenty of soap and water. ENTER or doctor/physician if you feel unwell. mmediately all contaminated clothing. d clothing before reuse. Sal Phrases:					
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		Sec	tion 3. Composition	/Information of	on Ingredie	nts
CAS RTEC		Hazardous Com REACH Registra	oonents (Chemical Name)/ tion No.	Concentration	EC No./ EC Index No.	GHS Classification
82320 NA	)2-99-9	Butanamide, ß-alanyl-L-prolyl-2,4 (2S)-, acetate (1:2)	-diamino-N-(phenylmethyl)-,	100.0 %	676-431-9 NA	Acute Tox.(D) 3: H311
			Section 4. Fi	rst Aid Measu	ires	
4.1	Descrip Measur	otion of First Aid es:				
	In Case	of Inhalation:	Remove to fresh air. If not bree Get immediate medical attent		respiration or giv	e oxygen by trained personnel.
	In Case	of Skin Contact:	Immediately wash skin with s clothing. Get medical attentio			minutes. Remove contaminated efore reuse.
	In Case	of Eye Contact:	Hold eyelids apart and flush e and tested by medical person		ater for at least 15	5 minutes. Have eyes examined
	In Case	of Ingestion:	Wash out mouth with water p unconscious person. Get med medical personnel.	-	-	
			Section 5. Fire	Fighting Mea	sures	
5.1	Media:	e Extinguishing able Extinguishing	Use alcohol-resistant foam, o Use water spray to cool fire-e A solid water stream may be	exposed containers.	, or dry chemical	spray.
5.2		-	dNo data available.			
	Hazard	S:	No data available.			
	Flash P	't:	No data.			
		ve Limits:	LEL: No data.	UEL: No da	ta.	
	Autoigr	nition Pt:	No data.			
5.3	Fire Fig	hting Instructions	: As in any fire, wear self-conta equivalent), and full protectiv		-	
			Section 6. Acciden	tal Release N	leasures	
6.1	Protect Emerge	ency Procedures:	Avoid raising and breathing d As conditions warrant, wear and appropriate personal pro	dust, and provide add a NIOSH approved s otection (rubber boot	equate ventilation self-contained bre s, safety goggles,	athing apparatus, or respirator,
6.2	Enviror Precaut	tions:	Take steps to avoid release		, if safe to do so.	
6.3			r Contain spill and collect, as ang Transfer to a chemical waste		al in accordance	with local regulations.



# SAFETY DATA SHEET

## Dipeptide diaminobutyroyl benzylamide (acetate)

		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:	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 Phys	ical 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): Vanar Dansity (va. Air – 1)	No data.
	Vapor Density (vs. Air = 1)	
	Specific Gravity (Water = 1	
	Solubility in Water:	No data. ~10 mg/ml in PBS (pH 7.2); ~3 mg/ml in DMSO;
	Solubility Notes: Octanol/Water Partition	$\sim$ 10 mg/m m PBS (pH 7.2), $\sim$ 3 mg/m m DNSO, No data.
	Coefficient:	ino uala.



	Autoign	ition Pt:		No data.					
	Decomp	osition Temperat	ure:	No data.					
	Viscosit	y:		No data.					
9.2	Other Inf	ormation							
	Percent	Volatile:		No data.					
	Molecul	ar Formula & Wei	ght:	C19H29N5O3 • 2C2H4O2	495.6				
			Ś	Section 10. Stability	and Reacti	vity			
10.1	Reactivi	ty:	No da	ata available.					
10.2	Stability	:	Unsta	Instable [ ] Stable [ X ]					
10.3	Stability	Note(s):	Stabl	e if stored in accordance with i	nformation listed	on the product	insert.		
	Polyme	rization:	Will c	occur [ ] Will not occur [ X	]				
10.4	Conditio	ons To Avoid:	No da	ata available.					
10.5	Incompa	atibility - Materials	s No da	ata available.					
	To Avoi	d:							
10.6	Hazardo	ous	No da	ata available.					
	Decomp	osition or							
	Byprodu	ucts:							
			S	ection 11. Toxicolog	ical Inform	ation			
11.1	Informa	tion on	The t	oxicological effects of this prod	uct have not bee	n thoroughly st	tudied.		
	Toxicolo	ogical Effects:							
CAS	#	Hazardous Com	poner	nts (Chemical Name)	NTP	IARC	ACGIH	OSHA	
<u> </u>		Butanamide,	<u> </u>		n.a.	n.a.	n.a.	n.a.	
02.02	102-99-9	· ·	2,4-dia	amino-N-(phenylmethyl)-, (2S)-		n.a.	11.a.	11.a.	
				Section 12. Ecologic	al Informat				
	Taulali								
12.1	Toxicity	:		I release into the environment. If from fire control or dilution w	ater may cause p	ollution.			
12.2	Persiste	ence and	No da	ata available.					
	Degrada	ability:							
12.3	Bioaccu	mulative	No da	ata available.					
	Potentia	d:							
12.4	Mobility	in Soil:	No da	ata available.					
12.5	Results	of PBT and vPvB	No d	ata available.					
	assessn	nent:							
12.6	Other ad	dverse effects:	No d	ata available.					

Multi-region format



Multi-region format

		Section 13. Dispos	al Considerat	ions		
13.1 Waste D	)isposal Method <sup>.</sup>	Dispose in accordance with loca				
		-		-		
		Section 14. Trans	spon mormai	ION		
	RANSPORT (US	-				
-	er Shipping Name	Not dangerous goods.				
DOT Hazar UN/NA Nur						
	RANSPORT (Eur	onean ADB/BID).				
	Shipping Name:	Not dangerous goods.				
UN Numbe		Not dangerede geode.				
Hazard Cla	ISS:					
14.3 AIR TR	ANSPORT (ICAO/	ΊΑΤΑ):				
ICAO/IATA	Shipping Name:	Not dangerous goods.				
Additional Tra	nsport	Transport in accordance with loo	cal, state, and federa	l regulations.		
Information:						
		Section 15. Regul	atory Informa	tion		
EPA SARA (Sı	perfund Amendn	nents and Reauthorization Act o	of 1986) Lists			
CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
823202-99-9	Butanamide, ß-alanyl-L-prolyl- (2S)-, acetate (1:	-2,4-diamino-N-(phenylmethyl)-, :2)	No	No	No	
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or S	State Lists	•	
823202-99-9 Butanamide,		-2,4-diamino-N-(phenylmethyl)-, :2) CAA HAP,ODC: No; CWA NPDES: No; TSCA: No		No; TSCA: No; CA		
Regulatory Information Statement:		This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.				
Statement:						
Statement:		Section 16. Oth	ner Information	า		
		Section 16. Oth 08/17/2019	er Information	ז		
Revision Date:	rmation About		er Information	ז		