

	-				
	Section 1. Ic	dentification of the Substance/Mixture and of the	e Company/Undertaking		
1.1	Product Code:11685Product Name:BavachinSynonyms:(2S)-2,3-dihydro-7-hydroxy-2-(4-hydroxyphenyl)-6-(3-methyl-2-butenyl)-4H-1-benzopyra				
 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. 					
.3	Details of the Supplier of th	e 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 num	ber:			
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300		
		CHEMTREC Outside USA and Canada:	+1 (703)527-3887		
		Section 2. Hazards Identifica	tion		
2.2	Acute Toxicity: Inhalation Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements:	egory 4			
2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate	egory 4			
2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate	egory 4			
2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements:	egory 4			
2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word:	egory 4 egory 4 Warning			
.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases:	egory 4 egory 4 Warning			
.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed	egory 4 egory 4 Warning			
2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful in contact w	egory 4 egory 4 Warning J. vith skin.			
2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful in contact w H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dustion	egory 4 egory 4 Warning J. vith skin.			
2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful if swallowed H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dus P264: Wash {hands} thorow	egory 4 egory 4 Warning 4. //th skin. : st/fume/gas/mist/vapors/spray}. ughly after handling.			
2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful if swallowed H312: Harmful if nhaled. GHS Precaution Phrases: P261: Avoid breathing {dus P264: Wash {hands} thorou P280: Wear {protective glob	egory 4 egory 4 Warning J. vith skin.	n}.		
2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful if swallowed H312: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dus P264: Wash {hands} thorou P280: Wear {protective glot GHS Response Phrases:	egory 4 egory 4 Warning 4. //th skin. : st/fume/gas/mist/vapors/spray}. ughly after handling. ves/protective clothing/eye protection/face protectio			
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2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful if swallowed H312: Harmful if nhaled. GHS Precaution Phrases: P261: Avoid breathing {dus P264: Wash {hands} thorou P280: Wear {protective glov GHS Response Phrases: P301+312: IF SWALLOWE P302+352: IF ON SKIN: W	egory 4 egory 4 Warning d. it h skin. it h s	rou feel unwell.		
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2.2	Acute Toxicity: Oral, Cate Acute Toxicity: Skin, Cate Label Elements: GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallowed H312: Harmful if swallowed H312: Harmful in contact w H332: Harmful if inhaled. GHS Precaution Phrases: P261: Avoid breathing {dus P264: Wash {hands} thorou P280: Wear {protective glob GHS Response Phrases: P301+312: IF SWALLOWE P302+352: IF ON SKIN: W P304+340: IF INHALED: R P312: Call a POISON CEN	egory 4 egory 4 Warning d. rith skin. st/fume/gas/mist/vapors/spray}. ughly after handling. ves/protective clothing/eye protection/face protectio ED: Call a POISON CENTER or doctor/physician if y ash with plenty of soap and water. emove victim to fresh air and keep at rest in a positi ITER or doctor/physician if you feel unwell. clothing before reuse.	rou feel unwell.		



2.3		e Human Health and Symptoms:	Harmful if inhaled, swallowed, or in contact with skin.Material may be irritating to the mucous membranes and upper respiratory tract.May cause eye, skin, or respiratory system irritation.To the best of our knowledge, the toxicological properties have not been thoroughly investigated.					
		Sec	tion 3. Composition	/Information	on Ingredie	ents		
CAS RTE	#/ CS #	Hazardous Com REACH Registra	ponents (Chemical Name)/ tion No.	Concentration	EC No./ EC Index No.	GHS Classification		
198 NA	19879-32-4 Bavachin NA			100.0 %	683-181-4 NA	Acute Tox.(O) 4: H302 Acute Tox.(D) 4: H312 Acute Tox.(I) 4: H332		
			Section 4. Fi	rst Aid Meas				
4.1	Descri	ption of First Aid						
	Measu	res:						
	In Case	e of Inhalation:	Remove to fresh air. If not br	eathing, give artificia	al respiration or gi	ve oxygen by trained personnel.		
			Get immediate medical atten	tion.				
	In Case	e of Skin Contact:						
	In Coo	of Euro Comtooti	clothing. Get medical attention		-			
	in Case	e of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined 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					
			Section 5. Fire	Fighting Me	asures			
5.1	Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.				l spray.			
	Media:	Media: Use water spray to cool fire-exposed containers.						
	Unsuita Media:	Unsuitable Extinguishing A solid water stream may be inefficient. Media:						
5.2	Flamm	able Properties an	dNo data available.					
	Hazard	ls:						
			No data available.					
	Flash F	Pt:	No data.					
	-	ive Limits:	LEL: No data.	UEL: No d	ata.			
	-	nition Pt:	No data.					
5.3	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.							
			equivalent), and full protectiv	e gear to prevent co	ontact with skin ar	nd eyes.		

Multi-region format



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	Section 6. Accidental Release Measures								
6.1	6.1 Protective Precautions, Avoid raising and breathing dust, and provide adequate ventilation.								
	Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator					atus, or respirator,			
	Emerge	ncy Procedures:	and appropriate pers	onal protection (rubber boots,	safety goggles, and heavy re	ubber gloves).			
6.2									
	Precautions:								
6.3	Method	s and Material Fo	r Contain spill and coll	ect, 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	Precaut	ions To Be Taken		fume/gas/mist/vapours/spray.					
/···	in Hand		Avoid prolonged or re						
7.2		-	Keep container tightly						
	in Stori			with information listed on the p	roduct insert.				
		_							
			tion 8. Exposu	re Controls/Persona	al Protection				
8.1	-	e Parameters:		Γ	Γ	T			
CAS	#	Partial Chemical	Name	Britain EH40	France VL	Europe			
1987	79-32-4	Bavachin		No data.	No data.	No data.			
CAS #	#	Partial Chemical	Name	OSHA TWA	ACGIH TWA	Other Limits			
1987	79-32-4	Bavachin		No data.	No data.	No data.			
8.2	Exposu	e Controls:							
8.2.1	Enginee	ering Controls	Use process enclosur	res, local exhaust ventilation, c	or other engineering controls	to control airborne			
	(Ventila	tion etc.):	levels below recomme	nended exposure limits.					
8.2.2	Persona	al protection equi	pment:						
	Eye Protection:		Safety glasses						
	Protecti	ve Gloves:	Compatible chemical-	chemical-resistant gloves					
	Other P	rotective Clothing	g:Lab coat	at					
			NIOSH approved resp	IOSH 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.						
			Wash thoroughly after handling. No data available.						
			No data available.						



SAFETY DATA SHEET Bavachin

		ection 9. Physical and Chemical Properties			
).1	Information on Basic Physical and Chemical Properties				
	Physical States:	[]Gas []Liquid [X]Solid			
	Appearance and Odor:	A crystalline solid			
	Melting Point:	No data.			
	Boiling Point:	No data.			
	Flash Pt:	No data.			
	Evaporation Rate:	No data. No data available. LEL: No data. UEL: No data.			
	Flammability (solid, gas):				
	Explosive Limits:				
	Vapor Pressure (vs. Air o Hg):	or mm No data.			
	Vapor Density (vs. Air = 1	1): No data.			
	Specific Gravity (Water =	No data.			
	Solubility in Water:	No data.			
	Solubility Notes:	~0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2); ~20 mg/ml in EtOH; ~30 mg/ml in DMSO; ~50 mg/ml in DMF;			
	Autoignition Pt:	No data.			
9.2	Other Information				
	Percent Volatile:	No data.			
	Molecular Formula & Wei				
		Section 10. Stability and Reactivity			
0.1	Reactivity:	No data available.			
10.2	Stability:	Unstable [] Stable [X]			
0.3	Stability Note(s):	Stable if stored in accordance with information listed on the product insert.			
	Polymerization: Will occur [] Will not occur [X]				
10.4	Conditions To Avoid:	No data available.			
10.5	0.5 Incompatibility - Materials strong oxidizing agents				
10.6	To Avoid: Hazardous	carbon dioxide			
10.0		carbon monoxide			
	Decomposition or Byproducts:	Carbon monoxide			
	Byproducts:				
		Multi-region form			



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AS #	ological Effects:	nponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
19879-32-4		nponents (Chemical Name)	n.a.	n.a.	n.a.	n.a.	
10010 02		Section 12 Feel					
	i4	Section 12. Ecol					
12.1 Toxic	ity:	Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.					
12.2 Persi	stence and						
	adability:						
-	cumulative	No data available.					
Poter	ntial:						
12.4 Mobi	ity in Soil:	No data available.					
12.5 Resu	Its of PBT and vPvI	B No data available.					
	ssment:						
12.6 Othe	adverse effects:	No data available.					
		Section 13. Dispo	sal Considera	tions			
13.1 Wast	e Disposal Method:	Dispose in accordance with loo	cal, state, and federal	regulations.			
		Section 14. Trar	nsport Informa	ition			
14.1 LAN	D TRANSPORT (US	DOT):					
DOT Pro	per Shipping Name	e: Not dangerous goods.					
DOT Ha	zard Class:						
UN/NA I	lumber:						
14.1 LAN	D TRANSPORT (Eu	ropean ADR/RID):					
ADR/RII	Shipping Name:	Not dangerous goods.					
UN Num							
Hazard							
	RANSPORT (ICAO	-					
Additional 1		Transport in accordance with	ocal state and feder	al regulations			
Information	-	Transport in accordance with		ai regulations.			
		Section 15. Regu	Ilatory Informa	ation			
		ments and Reauthorization Act					
CAS #	1	nponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 31	3 (TRI)	
19879-32-4		······································	No	No	No	<u> </u>	
CAS #	Hazardous Cor	nponents (Chemical Name)	Other US EPA or	State Lists	ļ		
				CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA			
19879-32-4		PROP.65: No					



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Regulatory Information This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) Statement: No.1272/2008.					
	Section 16. Other Information				
Revision Date:	08/15/2016				
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.				