

Revision: 04/21/2018

	Cr		ting to Regulation (EC) No. 190 entification of the Substan				
					the company/or	nuertakiny	
.1	Product Code:		24199				
	Product Name: Synonyms:		Hesperadin	27) phony/[[4 (1 pin	oridiovlmothyl)ph	anyllaminalmathylanal 1H inde	
	Synonyms.		yl]-ethanesulfonamide;	3Z)-phenyl[[4-(1-piperidinylmethyl)phenyl]amino]methylene]-1H-indo			
.2	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			e Safety Data Sheet:				
	Company Nam	e:	Cayman Chemical Comp	any			
			1180 E. Ellsworth Rd. Ann Arbor, MI 48108				
	Web site addre	ee.	www.caymanchem.com				
	Information:	33.	Cayman Chemical Comp	anv	+1 (73	4)971-3335	
.4	Emergency telep	hone numb					
	Emergency Co		CHEMTREC Within USA	and Canada:	+1 (80	0)424-9300	
			CHEMTREC Outside US	A and Canada:	+1 (70	3)527-3887	
			Section 2. Haz	zards Identifi	cation		
2.1	Classification of	the Substa	nce or Mixture:				
2.2	Label Elements:						
	GHS Signal Word: None						
	ene eigna me	ord:	None				
	GHS Hazard Pl		None				
	GHS Hazard Pl	hrases:	None ently available data this subs	stance or mixture is	not classifiable ac	cording to GHS.	
	GHS Hazard Pl	hrases: ation of curre		stance or mixture is	not classifiable ac	cording to GHS.	
	GHS Hazard Pl Based on evalu GHS Precautio No phrases app	hrases: ation of curro on Phrases: oly.		stance or mixture is	not classifiable ac	cording to GHS.	
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3	GHS Hazard Pl Based on evalu GHS Precautio No phrases app GHS Response No phrases app GHS Storage a Please refer to a Adverse Human	hrases: ation of curre on Phrases: oly. e Phrases: oly. Mod Disposa Section 7 for Health Mo optoms: M	ently available data this subs I <b>Phrases:</b> Storage and Section 13 for Material may be irritating to th May be harmful by inhalation, May cause eye, skin, or respi	Disposal informatic ne mucous membra , ingestion, or skin a ratory system irritat	n. nes and upper res absorption. ion.	spiratory tract.	
2.3	GHS Hazard Pl Based on evalu GHS Precautio No phrases app GHS Response No phrases app GHS Storage a Please refer to a Adverse Human	hrases: ation of curre on Phrases: oly. e Phrases: oly. Mod Disposa Section 7 for Health Mo optoms: Mo T	ently available data this subs I Phrases: Storage and Section 13 for laterial may be irritating to th lay be harmful by inhalation, lay cause eye, skin, or respi o the best of our knowledge	Disposal information ne mucous membra , ingestion, or skin a ratory system irritat , the toxicological p	n. nes and upper res absorption. ion. roperties have not	spiratory tract.	
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CAS	GHS Hazard Pl Based on evalu GHS Precautio No phrases app GHS Response No phrases app GHS Storage a Please refer to Adverse Human Effects and Sym	hrases: ation of curre- on Phrases: oly. Phrases: oly. and Disposa Section 7 for Health M ptoms: M T Sectic Sectic nus Compor Registratio	I Phrases: Storage and Section 13 for Material may be irritating to the May be harmful by inhalation, May cause eye, skin, or respine to the best of our knowledge on 3. Composition, May cause (Chemical Name)/	Disposal informatic ne mucous membra , ingestion, or skin a ratory system irritat , the toxicological p /Information	n. nes and upper res absorption. ion. roperties have not on Ingredie	spiratory tract. been thoroughly investigated	

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		Section 4. First Aid Measures				
4.1	Description of First Aid					
	Measures:					
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.				
	In Case 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.				
	In Case 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 medical personnel.				
		Section 5. Fire Fighting Measures				
5.1	Suitable Extinguishing	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.				
	Media:	Use water spray to cool fire-exposed containers.				
	Unsuitable Extinguishing Media:	g A solid water stream may be inefficient.				
5.2	Flammable Properties ar Hazards:	ndNo data available.				
		No data available.				
	Flash Pt:	No data.				
	Explosive Limits:	LEL: No data. UEL: No data.				
	Autoignition Pt:	No data.				
5.3	Fire Fighting Instruction	s: 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.				
		Section 6. Accidental Release Measures				
6.1	Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation.				
	Protective Equipment an	d 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 Precautions:	Take steps to avoid release into the environment, if safe to do so.				
6.3	Methods and Material Fo	r 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 Taker	Avoid breathing dust/fume/gas/mist/vapours/spray.				
	in Handling:	Avoid prolonged or repeated exposure.				
7.2	Precautions To Be Taker	Neep container tightly closed.				
	in Storing:	Store in accordance with information listed on the product insert.				
	Sec	tion 8. Exposure Controls/Personal Protection				
8.1	Exposure Parameters:					

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cuy							
8.2	Exposure Controls:						
8.2.1	Engineering Controls	e process enclosures, local exhaust ventilation, or other engineering controls to control airborne					
	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	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	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 Density (vs. Air = 1):	No data.					
	Specific Gravity (Water = 1	): No data.					
	Solubility in Water:	No data.					
	Solubility Notes:	~0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2); ~33 mg/ml in DMSO & DMF;					
	Octanol/Water Partition	No data.					
	Coefficient:						
	Autoignition Pt:	No data.					
	Decomposition Temperatu	re: No data.					
	Viscosity:	No data.					
9.2	Other Information						
	Percent Volatile:	No data.					
	Molecular Formula & Weig	ht: C29H32N4O3S 516.7					

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### SAFETY DATA SHEET Hesperadin

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L			Section 10. Stability ar	nd Reactiv	vity			
10.1	Reactivi	ty:	No data available.					
10.2	Stability	:	Unstable [ ] Stable [ X ]					
10.3 Stability Note(s):			Stable if stored in accordance with information listed on the product insert.					
Polymerization:		ization:	Will occur [ ] Will not occur [ X ]					
10.4	Conditio	ons To Avoid:	No data available.					
10.5	Incompa	atibility - Materials	strong oxidizing agents					
To Avoid:								
10.6	Hazardous Decomposition or Byproducts:		carbon dioxide					
			carbon monoxide					
			hydrogen sulfide					
			nitrogen oxides					
			Section 11. Toxicologic	al Informa	ation			
11.1	Informat	tion on	The toxicological effects of this product	have not beer	n thoroughly st	udied.		
	Toxicolo	ogical Effects:						
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
4225	13-13-1	Hesperadin		n.a.	n.a.	n.a.	n.a.	
		•	Section 12. Ecological	Informat	ion	·	·	
12.1	Toxicity	:	Avoid release into the environment.					
	loxiony.		Runoff from fire control or dilution water may cause pollution.					
	D. Develotorios and		Runoff from fire control or dilution wate	r may cause p	ollution.			
12.2	Persiste	nce and	Runoff from fire control or dilution wate No data available.	r may cause p	ollution.			
12.2				r may cause p	ollution.			
	Degrada	bility:	No data available.	r may cause p	ollution.			
	Degrada	bility: mulative		r may cause p	ollution.			
12.3	Degrada Bioaccu Potentia	ibility: mulative II:	No data available. No data available.	r may cause p	ollution.			
12.3 12.4	Degrada Bioaccu Potentia Mobility	ability: mulative II: in Soil:	No data available. No data available. No data available.	r may cause p	ollution.			
12.3 12.4	Degrada Bioaccu Potentia Mobility Results	ability: mulative II: in Soil: of PBT and vPvB	No data available. No data available.	r may cause p	ollution.			
12.3 12.4 12.5	Degrada Bioaccu Potentia Mobility Results assessm	ability: mulative II: in Soil: of PBT and vPvB	No data available. No data available. No data available.	r may cause p	ollution.			
12.3 12.4 12.5	Degrada Bioaccu Potentia Mobility Results assessm	ability: mulative II: in Soil: of PBT and vPvB ment:	No data available. No data available. No data available. No data available. No data available.					
12.3 12.4 12.5 12.6	Degrada Bioaccu Potentia Mobility Results assessn Other ac	ability: mulative II: in Soil: of PBT and vPvB nent: dverse effects:	No data available. No data available. No data available. No data available. No data available. <b>Section 13. Disposal Co</b>	onsiderat	ions			
12.3 12.4 12.5 12.6	Degrada Bioaccu Potentia Mobility Results assessn Other ac	ability: mulative II: in Soil: of PBT and vPvB ment:	No data available. No data available. No data available. No data available. No data available. <b>Section 13. Disposal Co</b> Dispose in accordance with local, state	Onsiderat , and federal re	ONS egulations.			
12.2 12.3 12.4 12.5 12.6 13.1	Degrada Bioaccu Potentia Mobility Results assessm Other ac	ability: mulative il: in Soil: of PBT and vPvB ment: dverse effects:	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Co Dispose in accordance with local, state Section 14. Transport	Onsiderat , and federal re	ONS egulations.			
12.3 12.4 12.5 12.6 13.1 14.1	Degrada Bioaccu Potentia Mobility Results assessm Other ac Waste D	ability: mulative al: in Soil: of PBT and vPvB nent: dverse effects: visposal Method:	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Co Dispose in accordance with local, state Section 14. Transport	Onsiderat , and federal re	ONS egulations.			
12.3 12.4 12.5 12.6 13.1 14.1 D	Degrada Bioaccu Potentia Mobility Results assessm Other ac Waste D LAND T	ability: mulative al: in Soil: of PBT and vPvB ment: dverse effects: visposal Method: RANSPORT (US I or Shipping Name:	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Co Dispose in accordance with local, state Section 14. Transport	Onsiderat , and federal re	ONS egulations.			
12.3 12.4 12.5 12.6 13.1 14.1 D	Degrada Bioaccu Potentia Mobility Results assessm Other ac Waste D LAND T OT Prope OT Hazar	ability: mulative al: in Soil: of PBT and vPvB nent: dverse effects: visposal Method: RANSPORT (US I or Shipping Name: d Class:	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Co Dispose in accordance with local, state Section 14. Transport	Onsiderat , and federal re	ONS egulations.			
12.3 12.4 12.5 12.6 13.1 14.1 D U	Degrada Bioaccu Potentia Mobility Results assessm Other ac Waste D LAND T OT Prope OT Hazard	ability: mulative al: in Soil: of PBT and vPvB nent: dverse effects: visposal Method: RANSPORT (US I or Shipping Name: d Class: nber:	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Co Dispose in accordance with local, state Section 14. Transport DOT): Not dangerous goods.	Onsiderat , and federal re	ONS egulations.			
12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1	Degrada Bioaccu Potentia Mobility Results assessm Other ac Waste D LAND T OT Prope OT Hazaro N/NA Nun LAND T	ability: mulative al: in Soil: of PBT and vPvB ment: dverse effects: visposal Method: r Shipping Name: d Class: mber: rRANSPORT (Euro	No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Co Dispose in accordance with local, state Section 14. Transport DOT): Not dangerous goods.	Onsiderat , and federal re	ONS egulations.			
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14.3 AIR TRANSPORT (ICAO/IATA): ICAO/IATA Shipping Name: N

ping Name: Not dangerous goods.

Transport in accordance with local, state, and federal regulations.

Information:

**Additional Transport** 

## Section 15. Regulatory Information

CAS #	Hazardous Components (Chemical Name)		S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)		
422513-13-1	Hesperadin		No	No	No		
CAS #	Hazardous Components (Chemical Name)		Other US EPA o	r State Lists	•		
422513-13-1	Hesperadin		CAA HAP,ODC: PROP.65: No	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No			
Regulatory Information Statement:		This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.					
		Section 16. Ot	her Informatio	on			
Revision Date:	:	04/21/2018					
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. 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.					