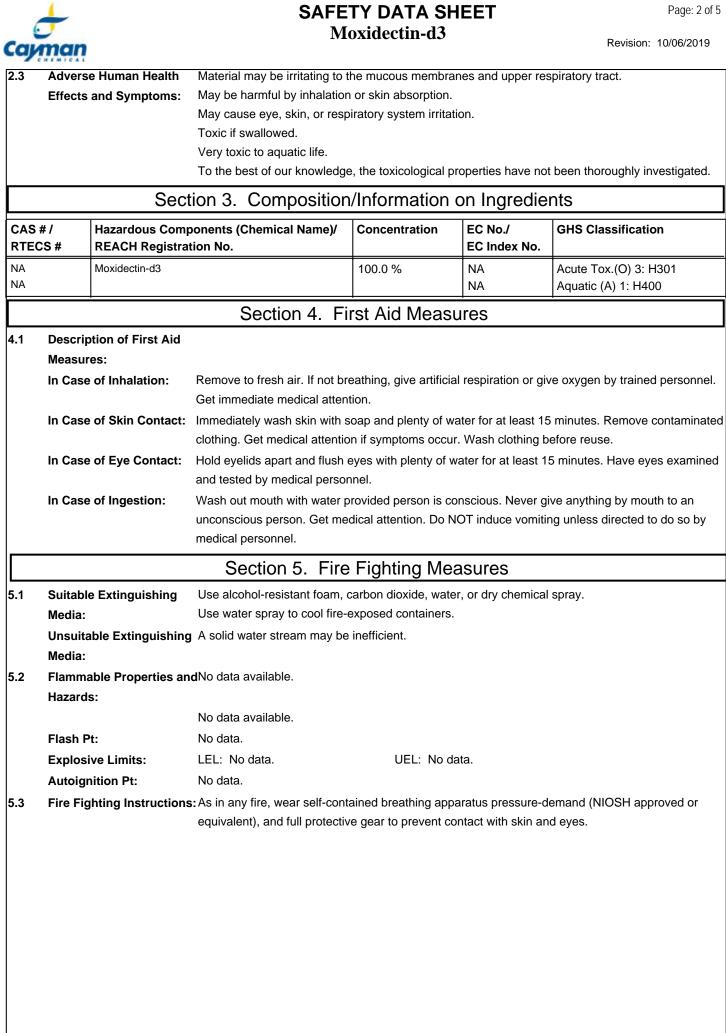


SAFETY DATA SHEET Moxidectin-d3

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		p Regulation (EC) No. 1907/2006 as amended by (EC) No. 2015/830						
	Section 1. Ide	entification of the Substance/Mixture and of th	e Company/Undertaking					
.1	Product Code:	28766						
	Product Name:	Moxidectin-d3						
	Synonyms:	-	5,17a'R,20'R,20a'R)-2a1',20'-dihydroxy-4-((meth					
			hthylpent-2-en-2-yl)-2a1',3,4,5,6,6',7',10',11',14',					
		cino[9,8,7-cd]benzofuran]-17'-one; CL-301423-	oyran-2,13'-[11,15]methano[1,5]dioxacyclooctad d3:					
2	Relevant identified uses of the substance or mixture and uses advised against:							
_	Relevant identified uses:	For research use only, not for human or veterin						
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:							
	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					
.1	Classification of the Substan Acute Toxicity: Oral, Categ Aquatic Toxicity (Acute), C	gory 3						
.1 .2	Acute Toxicity: Oral, Categ	gory 3						
	Acute Toxicity: Oral, Catego Aquatic Toxicity (Acute), C Label Elements:	gory 3 Category 1						
	Acute Toxicity: Oral, Category Aquatic Toxicity (Acute), O Label Elements:	gory 3						
	Acute Toxicity: Oral, Catego Aquatic Toxicity (Acute), O Label Elements: GHS Signal Word: GHS Hazard Phrases:	gory 3 Category 1						
	Acute Toxicity: Oral, Catego Aquatic Toxicity (Acute), O Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed.	gory 3 Category 1 Danger						
	Acute Toxicity: Oral, Catego Aquatic Toxicity (Acute), O Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic I	gory 3 Category 1 Danger ife.						
	Acute Toxicity: Oral, Catego Aquatic Toxicity (Acute), O Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic I GHS Precautionary Phrase	gory 3 Category 1 Danger ife. es:						
	Acute Toxicity: Oral, Catego Aquatic Toxicity (Acute), O Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic I	gory 3 Category 1 Danger ife. es: ghly after handling.						
	Acute Toxicity: Oral, Catego Aquatic Toxicity (Acute), O Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic I GHS Precautionary Phraseo P264: Wash {hands} thoroug	gory 3 Category 1 Danger ife. es: ghly after handling.						
	Acute Toxicity: Oral, Catego Aquatic Toxicity (Acute), O Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic I GHS Precautionary Phrase P264: Wash {hands} thoroug P273: Avoid release to the e GHS Response Phrases:	gory 3 Category 1 Danger ife. es: ghly after handling.	/physician.					
	Acute Toxicity: Oral, Catego Aquatic Toxicity (Acute), O Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic I GHS Precautionary Phrase P264: Wash {hands} thoroug P273: Avoid release to the e GHS Response Phrases:	gory 3 Category 1 Danger ife. es: ghly after handling. invironment.	/physician.					
	Acute Toxicity: Oral, Categon Aquatic Toxicity (Acute), O Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic H GHS Precautionary Phrases P264: Wash {hands} thoroug P273: Avoid release to the e GHS Response Phrases: P301+310: IF SWALLOWED	gory 3 Category 1 Danger ife. es: ghly after handling. invironment.	/physician.					
	Acute Toxicity: Oral, Categon Aquatic Toxicity (Acute), Or Label Elements: GHS Signal Word: GHS Hazard Phrases: H301: Toxic if swallowed. H400: Very toxic to aquatic H GHS Precautionary Phrase P264: Wash {hands} thoroug P273: Avoid release to the element GHS Response Phrases: P301+310: IF SWALLOWED P330: Rinse mouth. P391: Collect spillage. GHS Storage and Disposa	gory 3 Sategory 1 Danger ife. es: ghly after handling. invironment. D: Immediately call a POISON CENTER or doctor.						



Multi-region format



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		Section 6. Accidental Release Measures					
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,					
	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.					
	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	ction 9. Physical and Chemical Properties					
9.1	Information on Basic Physi	cal and Chemical Properties					
	Physical States:	[]Gas []Liquid [X]Solid					
	Appearance and Odor:	A 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.					
		Multi-region forma					

Cayman

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	Specific Gr	avity (Water =	1):	No data.					
	Solubility in	n Water:		No data.					
	Solubility N	lotes:		Soluble in: MeOH; c	hloroform;				
	Octanol/Wa	ter Partition		No data.					
	Coefficient	:							
	Autoignitio	n Pt:		No data.					
	-	tion Temperat	ure:	No data.					
	Viscosity:			No data.					
9.2	Other Inform	nation							
5.2	Percent Vo			No data.					
			~h.t.		640.9				
	wolecular	Formula & Weig	gnt:	C37H50D3NO8	642.8				
			S	ection 10. Sta	bility and	React	ivity		
10.1	Reactivity:		No dat	a available.					
10.2	Stability:		Unstat	ole [] Stable [X]				
10.3	Stability No	ote(s):	Stable	if stored in accordance	ce with informa	tion listed	on the product	insert.	
	Polymeriza	tion:	Will oc	cur [] Will not o	ccur [X]				
10.4	Conditions	To Avoid:	No dat	a available.					
10.5	Incompatib	ility - Materials	strong	oxidizing agents					
	To Avoid:								
10.6	Hazardous		carbor	dioxide					
	Decomposi	tion or	carbor	monoxide					
	Byproducts		nitroge	en oxides					
			50	otion 11 Toxi	oologiool	Inform	otion		
				ction 11. Toxi					
11.1			I ne to	xicological effects of t	inis product nav	/e not bee	n thoroughly st	udied.	
	Toxicologio								- 1
CAS			ponent	s (Chemical Name)		NTP	IARC	ACGIH	OSHA
	NA M	oxidectin-d3				n.a.	n.a.	n.a.	n.a.
			S	ection 12. Eco	ological Ir	nforma	tion		
12.1	Toxicity:		Avoid	release into the enviro	onment.				
			Runoff	from fire control or di	ilution water ma	ay cause p	ollution.		
12.2	Persistence	e and	No dat	a available.					
	Degradabil	ity:							
12.3	Bioaccumu	-	No dat	a available.					
	Potential:								
12.4			No dat	a available.					
12.5	-			a available					
12.0	assessment:								
12.6			a available						
12.0	Other adverse effects: No		no ua	No data available.					

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		Section 13. Dispo					
13.1 Waste	Disposal Method:	Dispose in accordance with loo	cal, state, and federal	regulations.			
		Section 14. Trar	nsport Informa	tion			
14.1 LAND	TRANSPORT (US	DOT):					
-	per Shipping Name	-	(Moxidectin-d3)				
	ard Class:	6.1 POISON					
UN/NA Nu	umber:	UN2811	Packing Gro	pup:	III		
		POISON 6					
14.1 LAND	TRANSPORT (Euro	opean ADR/RID):					
ADR/RID	Shipping Name:	Toxic solid, organic, n.o.s	. (Moxidectin-d3)				
UN Numb	er:	2811	Packing Gro	oup:	III		
Hazard C	lass:	6.1 - POISON					
14.3 AIR TI	RANSPORT (ICAO/	ATA):					
ICAO/IAT	A Shipping Name:	Toxic solid, organic, n.o.s	. (Moxidectin-d3)				
UN Numb	er:	2811	Packing Gro	oup:	III		
Hazard C	lass:	6.1 - POISON	IATA Classif	ication:	6.1		
		Therefore packaging does not Section 15. Regu	latory Informa	-	s/Excepted Quantity.		
EPA SARA (i	nents and Reauthorization Act	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)		
NA	Moxidectin-d3		No	No	No		
		nononto (Chomical Nama)					
CAS # Hazardous Components (Chemical Name) NA Moxidectin-d3			Other US EPA or State Lists 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	n			
Revision Date:		10/06/2019					
Additional Inf	formation About	No data available.					
This Product:							
Company Policy or Disclaimer:		DISCLAIMER: This information currently available to us. Howe express or implied, with respec- use. Users should make their their particular purposes.	ever, we make no war ct to such information,	ranty of merchanta and we assume n	bility or any other warrant o liability resulting from its		