

according to the Hazardous Products Regulations

# Diclazuril (0.25%) Formulation

### **SECTION 1. IDENTIFICATION**

Product name Other means of identification		Diclazuril (0.25%) Formulation Vecoxan 2.5 mg/mL Oral Suspension for Lambs and Calves (A011172)	
Manufacturer or supplier's d	eta	ills	
Company name of supplier	:	Merck & Co., Inc	
Address	:	126 E. Lincoln Avenue	
		Rahway, New Jersey U.S.A. 07065	
Telephone	:	908-740-4000	
Emergency telephone	:	1-908-423-6000	
E-mail address	:	EHSDATASTEWARD@merck.com	
Recommended use of the chemical and restrictions on use			
Recommended use	:	Veterinary product	
Restrictions on use	:	Not applicable	

#### **SECTION 2. HAZARDS IDENTIFICATION**

Reproductive toxicity	: Category 2	
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GHS label elements

:	
:	Warning
:	H361d Suspected of damaging the unborn child.
:	<b>Prevention:</b> P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves, protective clothing, eye protection and face protection.
	<b>Response:</b> P308 + P313 IF exposed or concerned: Get medical attention.
	Storage: P405 Store locked up.
	<b>Disposal:</b> P501 Dispose of contents and container to an approved waste disposal plant.
	: : :



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#### Other hazards

None known.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Cellulose	No data availa- ble	9004-34-6	>= 1 - < 5 *
Diclazuril	No data availa- ble	101831-37-2	>= 0.1 - < 1 *

\* Actual concentration or concentration range is withheld as a trade secret

#### **SECTION 4. FIRST AID MEASURES**

General advice	:	In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
If inhaled	:	If inhaled, remove to fresh air. Get medical attention.
In case of skin contact	:	In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
In case of eye contact	:	
If swallowed	:	If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water.
Most important symptoms and effects, both acute and delayed	:	Suspected of damaging the unborn child.
Protection of first-aiders	:	First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
Notes to physician	:	Treat symptomatically and supportively.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	None known.
Specific hazards during fire	:	Exposure to combustion products may be a hazard to health.



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F	ghting lazardous combustion prod- cts	:	Carbon oxides	
	pecific extinguishing meth- ds	:	cumstances and t Use water spray t	measures that are appropriate to local cir- he surrounding environment. o cool unopened containers. ged containers from fire area if it is safe to do
	pecial protective equipment or fire-fighters	:	In the event of fire	e, wear self-contained breathing apparatus. ective equipment.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : tive equipment and emer- gency procedures	Use personal protective equipment. Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
Environmental precautions :	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g., by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for : containment and cleaning up	Soak up with inert absorbent material. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

#### SECTION 7. HANDLING AND STORAGE

Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	:	Use only with adequate ventilation.
Advice on safe handling	:	Avoid inhalation of vapor or mist.
-		Do not swallow.
		Avoid contact with eyes.
		Avoid prolonged or repeated contact with skin.
		Handle in accordance with good industrial hygiene and safety
		practice, based on the results of the workplace exposure
		assessment



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	itions for safe storage ials to avoid	environment. : Keep in properl Store in accord : Do not store wi Strong oxidizing	event spills, waste and minimize release to the y labeled containers. ance with the particular national regulations. th the following product types: g agents
Materials to avoid			

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Cellulose	9004-34-6	TWA	10 mg/m <sup>3</sup>	CA AB OEL
		TWA (Total dust)	10 mg/m <sup>3</sup>	CA BC OEL
		TWA (respir- able dust fraction)	3 mg/m³	CA BC OEL
		TWAEV (to- tal dust)	10 mg/m <sup>3</sup>	CA QC OEL
		TWA	10 mg/m <sup>3</sup>	ACGIH
Diclazuril	101831-37-2	TWA	30 µg/m3 (OEB 3)	Internal
		Wipe limit	300 µg/100 cm2	Internal

Engineering measures	hnologies to control s quick connections engineering control sign and operated ir otect products, work ntainment technolog required to control	s should be implemented by facility n accordance with GMP principles to ers, and the environment. gies suitable for controlling compounds at source and to prevent migration of ntrolled areas (e.g., open-face
Personal protective equipme		
Respiratory protection	posure assessment	ust ventilation is not available or demonstrates exposures outside the nes, use respiratory protection.
Filter type Hand protection	rticulates type	
Material	emical-resistant glo	ves
Remarks Eye protection		ng. ith side shields or goggles. nt or activity involves dusty conditions,





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		Wear a faceshi	ls, wear the appropriate goggles. eld or other full face protection if there is a ect contact to the face with dusts, mists, or
Skin i	and body protection	Additional body task being perfe disposable suits	r laboratory coat. garments should be used based upon the prmed (e.g., sleevelets, apron, gauntlets, s) to avoid exposed skin surfaces. e degowning techniques to remove potentially lothing.
Hygie	ene measures	: If exposure to c eye flushing sys working place. When using do Wash contamin The effective op engineering con appropriate deg industrial hygie use of administ If exposure to c eye flushing sys working place. When using do Wash contamin The effective op engineering con appropriate deg	chemical is likely during typical use, provide stems and safety showers close to the not eat, drink or smoke. hated clothing before re-use. beration of a facility should include review of htrols, proper personal protective equipment, gowning and decontamination procedures, ne monitoring, medical surveillance and the rative controls. chemical is likely during typical use, provide stems and safety showers close to the not eat, drink or smoke. hated clothing before re-use. beration of a facility should include review of ntrols, proper personal protective equipment, gowning and decontamination procedures, ne monitoring, medical surveillance and the

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	suspension
Color	:	No data available
Odor	:	No data available
Odor Threshold	:	No data available
рН	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable

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	Flamm	ability (liquids)	:	No data available	
		explosion limit / Upper ability limit	:	No data available	
		explosion limit / Lower ability limit	:	No data available	
	Vapor	pressure	:	No data available	
	Relativ	e vapor density	:	No data available	
	Relativ	e density	:	No data available	
	Density	ý	:	No data available	
	Solubil Wa	ity(ies) ter solubility	:	No data available	
	Partitio octano	n coefficient: n-	:	Not applicable	
		nition temperature	:	No data available	
	Decom	position temperature	:	No data available	
	Viscos Viso	ity cosity, kinematic	:	No data available	
	Explos	ive properties	:	Not explosive	
	Oxidizi	ng properties	:	The substance or	mixture is not classified as oxidizing.
	Molecu	ılar weight	:	No data available	
	Particle	e size	:	Not applicable	

### SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical stability Possibility of hazardous reac- tions	:	Not classified as a reactivity hazard. Stable under normal conditions. Can react with strong oxidizing agents.
Conditions to avoid Incompatible materials Hazardous decomposition products	:	None known. Oxidizing agents No hazardous decomposition products are known.



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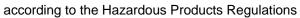
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#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure						
Inhalation Skin contact						
Ingestion						
Eye contact						
Acute toxicity						
Not classified based on availa	ble	information.				
Components:						
Cellulose:						
Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg				
Acute inhalation toxicity	:	LC50 (Rat): > 5.8 mg/l Exposure time: 4 h Test atmosphere: dust/mist				
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg				
Diclazuril:						
Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg				
		LD50 (Mouse): > 5,000 mg/kg				
		LD50 (Dog): > 5,000 mg/kg				
Acute inhalation toxicity	:	LC50 (Rat): > 2.24 mg/l				
Acute dermal toxicity	:	LD50 (Rabbit): > 4,000 mg/kg				
Acute toxicity (other routes of administration)	:	LD50 (Mouse): > 5,000 mg/kg Application Route: Subcutaneous Target Organs: Central nervous system				
Skin corrosion/irritation						
Not classified based on available	ble	information.				
Components:						
Diclazuril:						
Remarks	:	Not classified due to lack of data.				
Serious eye damage/eye irrit	tati	on				
Not classified based on availab	ble	information.				
Components:						
Diclazuril:						
Remarks	:	Not classified due to lack of data.				

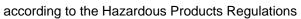
: Not classified due to lack of data.





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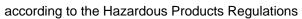
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Resp	piratory or skin sensi	tization							
-	Skin sensitization Not classified based on available information.								
-	<b>biratory sensitization</b> classified based on ava	ilable inform	ation.						
<u>Com</u>	ponents:								
<b>Dicla</b> Rema	<b>izuril:</b> arks	: Not c	lassified due	e to lack of data.					
Germ cell mutagenicity Not classified based on available information.									
Com	ponents:								
	llose:								
Geno	otoxicity in vitro		Type: Bacte lt: negative	rial reverse mutation assay (AMES)					
			Type: In vitr lt: negative	o mammalian cell gene mutation test					
Genc	otoxicity in vivo	cytog Speci Applio	Type: Mamr enetic assa ies: Mouse cation Route It: negative						
Dicla	zuril:								
Gend	otoxicity in vitro		Type: Bacte lt: negative	rial reverse mutation assay (AMES)					
		Test		o mammalian cell gene mutation test use lymphoma cells					
		Test		eduled DNA synthesis assay nepatocytes					
		Test		nosomal aberration nan lymphocytes					
Genc	otoxicity in vivo	Speci Cell t	Type: Micro ies: Mouse ype: Bone n lt: negative	nucleus test narrow					





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ersion 10	Revision Date: 02/22/2024		93387-00011	Date of last issue: 09/30/2023 Date of first issue: 08/14/2020
			Test Type: Sex-li anogaster (in vivo Result: negative	nked recessive lethal test in Drosophila mel- )
			Test Type: domin Species: Mouse Result: negative	ant lethal test
	n <b>ogenicity</b> assified based on avai	lable	information.	
Comp	onents:			
Cellul	ose:			
Specie		:	Rat	
	ation Route sure time	:	Ingestion 72 weeks	
Result		:	negative	
Diclaz	curil:			
Specie	es ation Route	:	Mouse Oral	
	sure time	÷	25 Months	
NOAE		:	3 mg/kg body we	
LOAE Result		:	11 mg/kg body w negative	eignt
Specie		:	Rat	
	ation Route sure time	:	Oral 28 Months	
NÓAE	E	:	4 mg/kg body we	
LOAE Result		:	15 mg/kg body w negative	eight
-	oductive toxicity		-	
	ected of damaging the <b>conents:</b>	unbo	rn child.	
Cellul				
	s on fertility	•	Test Type: One-c	eneration reproduction toxicity study
Eneod	on forting	•	Species: Rat	
			Application Route Result: negative	e: Ingestion
Effects	s on fetal development	: :		y/early embryonic development
			Species: Rat Application Route Result: negative	e: Ingestion
Diclaz	zuril:			





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			Early Embryonic I Symptoms: Reduc	Parent: NOAEL: 5 mg/kg body weight Development: LOAEL: 20 mg/kg body weight ced offspring weight gain. al toxicity observed.
Effec	ts on fetal development	:	Embryo-fetal toxic	: Oral oxicity: NOAEL: 80 mg/kg body weight oty.: LOAEL: 320 mg/kg body weight Resorptions / resorption rate., Late Resorp-
Repro	oductive toxicity - As- nent	:	Suspected of dam	aging the unborn child.
	<b>F-single exposure</b>			
	lassified based on availa	able	information.	
	<b>Γ-repeated exposure</b> lassified based on availa	ble	information	
	ponents:			
Dicla				
Targe	et Organs ssment	:	Liver, Lungs, Lym May cause damag exposure.	ph nodes ge to organs through prolonged or repeated
Repe	ated dose toxicity			
-	ponents:			
	lose:			
Spec NOAI Appli	ies	:	Rat >= 9,000 mg/kg Ingestion 90 Days	
Dicla	zuril:			
Spec NOAI LOAE Appli Expo	ies EL		Rat 6 mg/kg 74 mg/kg Oral 12 Months Liver, Lungs, Lym	ph nodes

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Spoo	ioc	: Rat	
Spec NOA		: 4 mg/kg	
LOAI		: 69 mg/kg	
-	cation Route	: Oral	
Expo	sure time	: 3 Months	
Targe	et Organs	: Liver	
Spec	ies	: Mouse	
NOA		: 30 mg/kg	
LOAI		: 60 mg/kg	
	cation Route	: Oral	
	sure time	: 3 Months	
Targe	et Organs	: Liver	
Spec	ies	: Dog	
NOA		: 20 mg/kg	
LOAI		: 80 mg/kg	
Expo	sure time	: 12 Months	3
Aspi	ration toxicity		
-	lassified based on av	ailable informatior	
Expe	erience with human e	exposure	
<u>Com</u>	ponents:		
Dicla	zuril:		
Inges	stion	: Symptoms	s: Diarrhea
ECTION	12. ECOLOGICAL II	NFORMATION	
Ecot	oxicity		
<u>Com</u>	ponents:		
Cellu	llose:		
Toxic	city to fish		zias latipes (Japanese medaka)): > 100 mg/l
			time: 48 h
		Remarks:	Based on data from similar materials
Dicla	zuril:		
	city to fish		oomis macrochirus (Bluegill sunfish)): 0.58 mg/l
1 UNIC			time: 96 h

Exposure time: 96 h Remarks: No toxicity at the limit of solubility.

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 0.63 mg/l Exposure time: 48 h Remarks: No toxicity at the limit of solubility.
Toxicity to algae/aquatic plants	:	EC50 (Selenastrum capricornutum (green algae)): > 1.1 mg/l Exposure time: 72 h Remarks: No toxicity at the limit of solubility.



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			Exposure time: 72	rum capricornutum (green algae)): 1.1 mg/l 2 h city at the limit of solubility.
	ty to daphnia and other ic invertebrates (Chron- city)	:	Exposure time: 2	magna (Water flea)): 0.16 mg/l 1 d city at the limit of solubility.
Persi	stence and degradabili	ity		
Comp	oonents:			
Cellu	lose:			
Biode	gradability	:	Result: Readily b	iodegradable.
Bioac	cumulative potential			
<u>Comp</u>	oonents:			
Dicla	zuril:			
Bioac	cumulation	:		s macrochirus (Bluegill sunfish) factor (BCF): 160
	on coefficient: n- ol/water	:	log Pow: 4.5 pH: 7	
Mobil	ity in soil			
No da	ta available			
Other	adverse effects			
No da	ta available			

Disposal methods		
Waste from residues	:	Do not dispose of waste into sewer. Dispose of in accordance with local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

#### **SECTION 14. TRANSPORT INFORMATION**

#### **International Regulations**

#### UNRTDG

Not regulated as a dangerous good

### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good



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Not a	sport in bulk accordin pplicable for product a estic regulation	-	RPOL 73/78 and the IBC Code			
<b>TDG</b> Not re	<b>TDG</b> Not regulated as a dangerous good					
•	Special precautions for user Not applicable					
SECTION	15. REGULATORY IN	NFORMATION				
	The ingredients of this product are reported in the following inventories:   AICS : not determined					

DSL	:	not determined
IECSC	:	not determined

#### **SECTION 16. OTHER INFORMATION**

Full text of other abbreviations				
ACGIH CA AB OEL	:	USA. ACGIH Threshold Limit Values (TLV) Canada. Alberta, Occupational Health and Safety Code (table		
CA BC OEL		2: OEL) Canada, British Columbia OEL		
CA QC OEL		Québec. Regulation respecting occupational health and safe- ty, Schedule 1, Part 1: Permissible exposure values for air- borne contaminants		
ACGIH / TWA CA AB OEL / TWA CA BC OEL / TWA CA QC OEL / TWAEV	:	8-hour, time-weighted average 8-hour Occupational exposure limit 8-hour time weighted average Time-weighted average exposure value		

AIIC - Australian Inventory of Industrial Chemicals: ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships;





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n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Sources of key data used to compile the Material Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/
Revision Date Date format	:	02/22/2024 mm/dd/yyyy

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CA / Z8