

## **Deltamethrin Collar**

Version 9.6	Revision Date: 06.04.2024		S Number: 702-00029	Date of last issue: 03.11.2023 Date of first issue: 01.04.2015
	1: IDENTIFICATION uct name	:	Deltamethrin Col	lar
Manu	ufacturer or supplier's d	letai	ils	
Com	bany	:	Intervet Australia	Pty Limited (trading as MSD Animal Health)
Addre	ess	:	91-105 Harpin St Bendigo 3550, V	
Telep	bhone	:	1 800 033 461	
Emer	gency telephone number	• :	Poisons Informat	ion Centre: Phone 13 11 26
E-ma	il address	:	EHSDATASTEW	/ARD@msd.com
Reco	mmended use of the ch mmended use ictions on use	nem : :	ical and restrictic Veterinary produc Not applicable	

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

GHS Classification		
Acute toxicity (Oral)	:	Category 4
Skin sensitisation	:	Category 1
Reproductive toxicity	:	Category 2
Specific target organ toxicity - repeated exposure (Oral)	:	Category 2 (Central nervous system, Immune system)
Specific target organ toxicity - repeated exposure (Inhala- tion)	:	Category 2 (Central nervous system)
GHS label elements		
Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	H302 Harmful if swallowed. H317 May cause an allergic skin reaction. H361fd Suspected of damaging fertility. Suspected of damag- ing the unborn child

ing the unborn child.



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		Immune system) swallowed. H373 May cause	e damage to organs (Central nervous system, ) through prolonged or repeated exposure if e damage to organs (Central nervous system) ed or repeated exposure if inhaled.
Preca	utionary statements	P202 Do not har and understood. P260 Do not bre P264 Wash skin P270 Do not eat P272 Contamina the workplace.	athe dust/ fume/ gas/ mist/ vapours/ spray. thoroughly after handling. , drink or smoke when using this product. ated work clothing should not be allowed out of ective gloves/ protective clothing/ eye protec-
		CENTER/ doctor P302 + P352 IF P308 + P313 IF attention.	P330 IF SWALLOWED: Call a POISON r if you feel unwell. Rinse mouth. ON SKIN: Wash with plenty of water. exposed or concerned: Get medical advice/ skin irritation or rash occurs: Get medical ad-
		<b>Storage:</b> P405 Store lock	ed up.
		<b>Disposal:</b> P501 Dispose of disposal plant.	f contents/ container to an approved waste
Other	hazards which do no	t result in classification	on

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

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

Substance / Mixture :

: Mixture

#### Components

Chemical name	CAS-No.	Concentration (% w/w)
Polyvinyl chloride	9002-86-2	>= 30 -< 60
Triphenyl phosphate	115-86-6	>= 30 -< 60
deltamethrin (ISO)	52918-63-5	>= 3 -< 10
Titanium dioxide	13463-67-7	>= 1 -< 10

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



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Gene	ral advice	vice immedi	of accident or if you feel unwell, seek medical a ately. toms persist or in all cases of doubt seek medic
lf inha	aled		emove to fresh air.
In case of skin contact		: In case of co of water. Remove cou Get medica Wash clothi	ontact, immediately flush skin with soap and ple ntaminated clothing and shoes.
In case of eye contact		: Flush eyes	with water as a precaution. attention if irritation develops and persists.
lf swa	allowed	: If swallowed Get medica Rinse mout	I, DO NOT induce vomiting.
	important symptoms iffects, both acute and ed	: Harmful if sy May cause a Suspected of unborn child May cause a exposure if May cause a exposure if This product Pyrethroid p	wallowed. an allergic skin reaction. of damaging fertility. Suspected of damaging the l. damage to organs through prolonged or repeate swallowed. damage to organs through prolonged or repeate
Prote	ction of first-aiders	: First Aid res and use the	ponders should pay attention to self-protection, recommended personal protective equipment otential for exposure exists (see section 8).
Notes	s to physician		omatically and supportively.
ECTION	5. FIREFIGHTING ME	ASURES	
Suita	ble extinguishing media	: Water spray	1

Suitable extinguishing media	:	Alcohol-resistant foam Carbon dioxide (CO2)
		Dry chemical
Unsuitable extinguishing media	:	None known.
Specific hazards during fire- fighting	:	Exposure to combustion products may be a hazard to health.
Hazardous combustion prod-	:	Carbon oxides
ucts		Nitrogen oxides (NOx)
		Bromine compounds
		Chlorine compounds
		Oxides of phosphorus
<b>.</b>		

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers.



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	al protective equipment efighters	:	so. Evacuate area In the event of	maged containers from fire area if it is safe to o fire, wear self-contained breathing apparatus. protective equipment.
SECTION	6. ACCIDENTAL RELE	AS	E MEASURES	
tive e	nal precautions, protec- quipment and emer- procedures	:	Follow safe ha	protective equipment. ndling advice (see section 7) and personal pro ent recommendations (see section 8).
Enviro	onmental precautions	:	Prevent further Retain and dis	to the environment. r leakage or spillage if safe to do so. pose of contaminated wash water. es should be advised if significant spillages tained.
Methods and materials for containment and cleaning up		:	tainer for dispo Local or nation posal of this m employed in th mine which reg Sections 13 an	acuum up spillage and collect in suitable con- sal. al regulations may apply to releases and dis- aterial, as well as those materials and items e cleanup of releases. You will need to deter- gulations are applicable. In 15 of this SDS provide information regardin in national requirements.
SECTION	7. HANDLING AND ST	OR	AGE	
Techr	nical measures	:		ng measures under EXPOSURE ERSONAL PROTECTION section.

	CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	: If sufficient ventilation is unavailable, use with local exhaust ventilation.
Advice on safe handling	<ul> <li>Do not get on skin or clothing. Do not breathe dust, fume, gas, mist, vapours or spray. Do not swallow. Avoid contact with eyes. Wash skin thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as- sessment Do not eat, drink or smoke when using this product. Take care to prevent spills, waste and minimize release to the environment.</li> </ul>
Hygiene measures	<ul> <li>If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.</li> <li>When using do not eat, drink or smoke.</li> <li>Contaminated work clothing should not be allowed out of the workplace.</li> <li>Wash contaminated clothing before re-use.</li> </ul>



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	itions for safe storage rials to avoid	engineering co appropriate de industrial hygie use of adminis : Keep in proper Store locked u Store in accord	dance with the particular national regulations. ith the following product types:

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

	· · · · · · · · · · · · · · · · · · ·				
Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis	
Polyvinyl chloride	9002-86-2	TWA (Res- pirable par- ticulate mat- ter)	1 mg/m3	ACGIH	
Triphenyl phosphate	115-86-6	TWA	3 mg/m3	AU OEL	
		TWA	3 mg/m3	ACGIH	
deltamethrin (ISO)	52918-63-5	TWA	15 µg/m3 (OEB 3)	Internal	
	Further information: DSEN, Skin				
		Wipe limit	100 µg/100 cm <sup>2</sup>	Internal	
Titanium dioxide	13463-67-7	TWA	10 mg/m3	AU OEL	
		TWA (Res-	2.5 mg/m3	ACGIH	
		pirable par-	(Titanium dioxide)		
		ticulate mat-			
		ter)			

### Components with workplace control parameters

This substance(s) is not bioavailable and therefore does not contribute to a dust inhalation hazard.

Titanium dioxide

#### Personal protective equipment

Respiratory protection	:	If adequate local exhaust ventilation is not available or expo- sure assessment demonstrates exposures outside the rec-
Filter type	:	ommended guidelines, use respiratory protection. Particulates type



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	protection aterial	:	Chemical-resista	nt gloves
	emarks rotection	:	If the work enviro mists or aerosols Wear a faceshield	gloving. ses with side shields or goggles. nment or activity involves dusty conditions, , wear the appropriate goggles. d or other full face protection if there is a t contact to the face with dusts, mists, or
Skin a	and body protection	:	Work uniform or I Additional body g task being perform posable suits) to	arments should be used based upon the ned (e.g., sleevelets, apron, gauntlets, dis- avoid exposed skin surfaces. degowning techniques to remove potentially

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	solid
Colour	:	white
Odour	:	very faint
Odour Threshold	:	No data available
рН	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	> 148.8 °C
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Not classified as a flammability hazard
Flammability (liquids)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable



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Relat	ive density	:	No data available	e
Dens	ity	:	No data available	9
	bility(ies) /ater solubility	:	No data available	e
	tion coefficient: n-	:	Not applicable	
	nol/water -ignition temperature	:	No data available	e
Deco	mposition temperature	:	No data available	9
Visco Vi	osity scosity, kinematic	:	Not applicable	
Explo	osive properties	:	Not explosive	
Oxidi	zing properties	:	The substance o	r mixture is not classified as oxidizing.
Mole	cular weight	:	Not applicable	
	cle characteristics cle 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.

#### SECTION 11. TOXICOLOGICAL INFORMATION

Exposure routes	:	Skin contact Ingestion Eye contact
Acute toxicity Harmful if swallowed.		
Product:		
Acute oral toxicity	:	Acute toxicity estimate: 1,668 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: > 5 mg/l



rsion	Revision Date: 06.04.2024		S Number: 702-00029	Date of last issue: 03.11.2023 Date of first issue: 01.04.2015
			Exposure time: 4	
			Test atmosphere: Method: Calculati	
<u>Comp</u>	oonents:			
-	enyl phosphate:			
Acute	oral toxicity	:	LD50 (Rat): > 5,0	00 mg/kg
Acute	dermal toxicity	:	LD50 (Rabbit): >	10,000 mg/kg
	nethrin (ISO):			
Acute	oral toxicity	:	LD50 (Rat): 66.7	mg/kg
			LD50 (Rat): 9 - 13	39 mg/kg
			LD50 (Mouse): 19	9 - 34 mg/kg
Acute	inhalation toxicity	:	LC50 (Rat): 0.8 m Exposure time: 2 Test atmosphere:	ĥ
Acute	dermal toxicity	:	LD50 (Rabbit): 2,	000 mg/kg
			LD50 (Rat): > 800	) mg/kg
	toxicity (other routes of istration)	:	LD50 (Rat): 2.5 m Application Route	
			LD50 (Mouse): 10 Application Route	
	um dioxide:			
Acute	oral toxicity	:	LD50 (Rat): > 5,0	00 mg/kg
Acute	inhalation toxicity	:	LC50 (Rat): > 6.8 Exposure time: 4 Test atmosphere: Assessment: The tion toxicity	h
	corrosion/irritation assified based on availa			

#### Components:

### Triphenyl phosphate:

Species	: Rabbit
Method	: OECD Test Guideline 404
Result	: No skin irritation



ersion .6	Revision Date: 06.04.2024	SDS Nu 85702-0		Date of last issue: 03.11.2023 Date of first issue: 01.04.2015
delta	methrin (ISO):			
Spec		: Rab	bit	
Resu			skin irritation	
Titan	ium dioxide:			
Spec		: Rab		
Resu	lt	: No s	skin irritation	
Serio	ous eye damage/eye	irritation		
Not c	lassified based on ava	ailable inforr	nation.	
<u>Com</u>	ponents:			
-	enyl phosphate:			
Spec		: Rab		
Resu Methe			eye irritation CD Test Guid	eline 105
Meth	ou	. 020		
	methrin (ISO):			
Speci Resu		: Rab		tation
Resu	п		lerate eye irri	tation
Titan	ium dioxide:			
Spec		: Rab		
Resu	lt	: No e	eye irritation	
Resp	iratory or skin sensi	tisation		
Skin	sensitisation			
May o	cause an allergic skin	reaction.		
Resp	iratory sensitisation			
Not c	lassified based on ava	ailable inforr	mation.	
Com	ponents:			
Triph	enyl phosphate:			
Test			imisation Tes	st
	sure routes		contact	
Spec Metho			nea pig CD Test Guid	eline 406
Resu			ative	
delta	methrin (ISO):			
Test		: Max	imisation Tes	st
	· )			



Versior 9.6	n Revision Date: 06.04.2024	-	0S Number: 702-00029	Date of last issue: 03.11.2023 Date of first issue: 01.04.2015
Re	esult	:	negative	
Ex Sp	est Type posure routes pecies esult	:	Human repeat Dermal Humans positive	insult patch test (HRIPT)
Te Ex Sp	t <b>anium dioxide:</b> est Type posure routes pecies esult	:	Local lymph no Skin contact Mouse negative	ode assay (LLNA)
Cł	nronic toxicity			
	erm cell mutagenicity ot classified based on av	ailable	information.	
<u>Cc</u>	omponents:			
	iphenyl phosphate: enotoxicity in vitro	:		romosome aberration test in vitro ) Test Guideline 473 re
				cterial reverse mutation assay (AMES) ) Test Guideline 471 /e
			Test Type: In v Result: negativ	itro mammalian cell gene mutation test e
de	Itamethrin (ISO):			
	enotoxicity in vitro	:	Test Type: Bac Result: negativ	cterial reverse mutation assay (AMES) re
			Test Type: DN Test system: E Result: negativ	scherichia coli
				romosomal aberration chinese hamster ovary cells re
			Test system: C	ritro mammalian cell gene mutation test chinese hamster lung cells LOAEL: 20 mg/kg
Ge	enotoxicity in vivo	:	Test Type: Mic Species: Mous	



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		Application Rou Result: negative	
		-	ninant lethal test e ute: Oral
		-	er chromatid exchange assay e marrow ute: Oral
Titan	ium dioxide:		
Geno	toxicity in vitro	: Test Type: Bac Result: negative	terial reverse mutation assay (AMES) e
Geno	toxicity in vivo	: Test Type: In vi Species: Mouse Result: negative	
Not c	i <b>nogenicity</b> lassified based on ava ponents:	ailable information.	
-			
Speci Applic Expos NOAE LOAE Resu	cation Route sure time EL EL	<ul> <li>Mouse, male an</li> <li>oral (feed)</li> <li>104 weeks</li> <li>8 mg/kg body w</li> <li>4 mg/kg body w</li> <li>positive</li> <li>Lymph nodes</li> </ul>	veight
	cation Route sure time	: Rat, male and f : oral (feed) : 2 Years : negative	emale
	cation Route sure time EL	<ul> <li>Dog, male and</li> <li>oral (feed)</li> <li>2 Years</li> <li>1 mg/kg body w</li> <li>negative</li> </ul>	
Speci Applio	<b>ium dioxide:</b> ies cation Route sure time	: Rat : inhalation (dust : 2 Years	/mist/fume)
		11 / 20	



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Meth Resu Rema	lt	: positive : The mecha mans. This substa	t Guideline 453 nism or mode of action may not be relevant in hu- ance(s) is not bioavailable and therefore does not o a dust inhalation hazard.
Carci ment	nogenicity - Assess-	: Limited evidentiation : Limi	dence of carcinogenicity in inhalation studies with
Susp	oductive toxicity ected of damaging ferti ponents:	lity. Suspected of	damaging the unborn child.
	enyl phosphate:		
-	ts on fertility	Species: R	Route: Ingestion
Effec ment	ts on foetal develop-	Species: R Application	Route: Ingestion ECD Test Guideline 414
delta	methrin (ISO):		
	ts on fertility	Species: R Application Early Embr weight Symptoms:	Three-generation reproduction toxicity study at Route: oral (feed) yonic Development: NOAEL: 50 mg/kg body No effects on fertility, Embryo-foetal toxicity Significant toxicity observed in testing
		Species: R Application Early Embr weight	Two-generation reproduction toxicity study at Route: Oral yonic Development: LOAEL: 84 - 149 mg/kg body
		Fertility: LC Symptoms:	
Effec	ts on foetal develop-	: Test Type:	Development



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ment		Species: Mous	
ment		Application Ro Developmenta Result: Skeleta	ute: oral (gavage) I Toxicity: LOAEL: 1 mg/kg body weight al malformations ernal toxicity observed.
		Developmenta	
Repro sessn	oductive toxicity - As- nent		e of adverse effects on sexual function and on development, based on animal experiment
	- single exposure		
Not cl <u>Comp</u>	assified based on avai	lable information.	
Not cl <u>Comr</u> deltar	assified based on avai		piratory irritation.
Not cl <u>Comp</u> deltar Asses STOT	assified based on avai <u>conents:</u> methrin (ISO): assment - repeated exposure	: May cause res	
Not cl Comp deltar Asses STOT May c repea	assified based on avai <u>conents:</u> methrin (ISO): assment - repeated exposure cause damage to organ ted exposure if swallow cause damage to organ	: May cause res ns (Central nervous s ved.	ystem, Immune system) through prolonged or
Not cl Comp deltar Asses STOT May c repea May c if inha	assified based on avai <u>conents:</u> methrin (ISO): assment - repeated exposure cause damage to organ ted exposure if swallow cause damage to organ	: May cause res ns (Central nervous s ved.	ystem, Immune system) through prolonged or
Not cl Comp deltar Asses STOT May co repea May co if inha	assified based on avai <u>conents:</u> methrin (ISO): assment - repeated exposure cause damage to organited exposure if swallow cause damage to organited.	: May cause res ns (Central nervous s ved.	ystem, Immune system) through prolonged or
Not cl Comp deltar Asses STOT May c repea May c if inha Comp deltar Expos Targe	assified based on avai <u>conents:</u> methrin (ISO): assment - repeated exposure cause damage to organited exposure if swallow cause damage to organited. bonents:	: May cause res is (Central nervous s ved. is (Central nervous s : Ingestion : Central nervou	ystem, Immune system) through prolonged or
Not cl Comp deltai Asses STOT May c repea May c if inha Comp deltai Expos Targe Asses	assified based on avai <u>conents:</u> methrin (ISO): assment - repeated exposure cause damage to organ ted exposure if swallow cause damage to organ aled. <u>conents:</u> methrin (ISO): sure routes of Organs	<ul> <li>May cause restored in the second secon</li></ul>	ystem, Immune system) through prolonged or ystem) through prolonged or repeated exposu is system, Immune system ge to organs through prolonged or repeated
Not cl Comp deltau Asses STOT May co repea May co if inha Comp deltau Expos Targe Asses	assified based on avai <u>conents:</u> methrin (ISO): assment - repeated exposure cause damage to organited exposure if swallow cause damage to organited. <u>conents:</u> methrin (ISO): sure routes at Organs assment sure routes at Organs	<ul> <li>May cause restored.</li> <li>Ingestion</li> <li>Central nervous s</li> <li>Central nervous s</li> <li>Causes damager exposure.</li> <li>inhalation (duster causes damager)</li> <li>Causes damager)</li> <li>Central nervou</li> <li>Central nervou</li> </ul>	ystem, Immune system) through prolonged or ystem) through prolonged or repeated exposu is system, Immune system ge to organs through prolonged or repeated st/mist/fume) is system
Not cl Comp deltai Asses STOT May c repea May c if inha Comp deltai Expos Targe Asses Repea	assified based on avai <u>conents:</u> methrin (ISO): assment - repeated exposure cause damage to organited exposure if swallow cause damage to organited. <u>conents:</u> methrin (ISO): sure routes to Organs assment sure routes to Organs assment	<ul> <li>May cause restored.</li> <li>Ingestion</li> <li>Central nervous s</li> <li>Central nervous s</li> <li>Causes damager exposure.</li> <li>inhalation (duster causes damager)</li> <li>Causes damager)</li> <li>Central nervou</li> <li>Central nervou</li> </ul>	ystem, Immune system) through prolonged or ystem) through prolonged or repeated exposu is system, Immune system ge to organs through prolonged or repeated st/mist/fume) is system



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	EL cation Route sure time	: Rat : 105 mg/kg : Ingestion : 90 Days : OECD Test G	uideline 408
deltar	methrin (ISO):		
Specie NOAE LOAE Applic Expos	es EL EL cation Route sure time ot Organs	: Rat, male and : 1 mg/kg : 2.5 mg/kg : Oral : 13 Weeks : Nervous syste : hyperexcitabili	em
Specie LOAE Applic	es :L cation Route sure time	: Rat : 3 mg/m3 : inhalation (dus : 2 wk / 5 d/wk /	st/mist/fume)
Expos	EL EL sution Route sure time to Organs	: Dog : 0.1 mg/kg : 1 mg/kg : Oral : 13 Weeks : Nervous syste : Dilatation of th tion	em ne pupil, Vomiting, Tremors, Diarrhoea, Saliva-
Expos	EL	: Rat : 14 mg/kg : 54 mg/kg : Oral : 91 d : Nervous syste	em
Expos	L cation Route sure time t Organs	: Mouse : 6 mg/kg : Oral : 12 Weeks : Immune syste : immune syste	
Speci NOAE Applic		: Rat : 24,000 mg/kg : Ingestion : 28 Days	
Speci	es	: Rat	



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	NEL ication Route osure time	:	10 mg/m3 inhalation (dust/m 2 yr	ist/fume)
-	<b>iration toxicity</b> classified based on availa	ble	information.	
Exp	erience with human exp	osu	ire	
Proc	luct:			
Skin	contact	:	Remarks: Can be Based on Animal May irritate skin.	absorbed through skin. Evidence
Inge	stion	:		harmful if swallowed.
Com	ponents:			
delta	amethrin (ISO):			
Inha	lation	:	Headache, Nause	atory tract irritation, Dizziness, Sweating, ea, Vomiting, anorexia, Fatigue, tingling, d vision, muscle twitching
Skin	contact	:	Symptoms: Skin i sea, Vomiting, Di	rritation, Erythema, pruritis, Headache, Nau zziness, tingling, Sweating, muscle twitching tigue, anorexia, Allergic reactions
Inge	stion	:		e pain, Small pupils
ECTION	12. ECOLOGICAL INFO	DRN	MATION	
Eco	toxicity			
	-			
-	<u>Juct:</u> city to fish	:	LC50 (Pimephale Exposure time: 96 Method: OECD T	
	city to daphnia and other atic invertebrates	:	EC50 (Daphnia m Exposure time: 48 Method: OECD T	
Eco	toxicology Assessment			
	toxicology Assessment	:	Harmful to aquation	c life with long lasting effects.
Chro	••	:	Harmful to aquation	c life with long lasting effects.
Chro <u>Com</u> Trip	ponic aquatic toxicity ponents: henyl phosphate:			
Chro <u>Com</u> Trip	onic aquatic toxicity			hus mykiss (rainbow trout)): 0.4 mg/l



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	Toxicity plants	v to algae/aquatic	:	ErC50 (Raphidoce 3.73 mg/l Exposure time: 72 Method: OECD Te	
				NOEC (Raphidoco 0.25 mg/l Exposure time: 72 Method: OECD Te	
	Toxicity icity)	to fish (Chronic tox-	:	EC10 (Danio rerio Exposure time: 73 Method: OECD Te	
		to daphnia and other invertebrates (Chron- ty)	:	NOEC (Daphnia n Exposure time: 21 Method: OECD Te	
	<b>deltam</b> Toxicity	<b>ethrin (ISO):</b> v to fish	:	LC50 (Cyprinodor mg/l Exposure time: 96	n variegatus (sheepshead minnow)): 0.00048 Sh
				LC50 (Oncorhync Exposure time: 96	hus mykiss (rainbow trout)): 0.00039 mg/l 3 h
		to daphnia and other invertebrates	:	EC50 (Mysidopsis Exposure time: 48	s bahia (opossum shrimp)): 0.0037 µg/l 3 h
				EC50 (Daphnia m Exposure time: 48	agna (Water flea)): 0.0035 mg/l 3 h
				LC50 (Gammarus Exposure time: 96	fasciatus (freshwater shrimp)): 0.0003 µg/l 3 h
	Toxicity plants	to algae/aquatic	:	mg/l Exposure time: 72 Method: OECD Te	
	Toxicity icity)	to fish (Chronic tox-	:	NOEC (Pimephale mg/l Exposure time: 36	es promelas (fathead minnow)): 0.000022 3 d
				NOEC (Pimephale mg/l Exposure time: 26	es promelas (fathead minnow)): 0.000017 60 d
		to daphnia and other invertebrates (Chron-	:	NOEC (Daphnia n Exposure time: 21	nagna (Water flea)): 0.0041 µg/l d



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ic toxic	city)			
	um dioxide:			
Toxicit	y to fish	:	Exposure time: 96	chus mykiss (rainbow trout)): > 100 mg/l 5 h est Guideline 203
	y to daphnia and other c invertebrates	:	EC50 (Daphnia m Exposure time: 48	nagna (Water flea)): > 100 mg/l 3 h
Toxicit plants	y to algae/aquatic	:	EC50 (Skeletone Exposure time: 72	ma costatum (marine diatom)): > 10,000 m 2 h
Toxicit	y to microorganisms	:	EC50: > 1,000 m Exposure time: 3 Method: OECD T	
Persis	stence and degradabilities	ity		
<u>Comp</u>	onents:			
-	e <b>nyl phosphate:</b> gradability	:	Result: Readily bi Biodegradation: 4 Exposure time: 28	83 - 94 %
	<b>nethrin (ISO):</b> ty in water	:	Hydrolysis: 0 %(3	0 d)
Bioac	cumulative potential			
	onents:			
	enyl phosphate:			
•	cumulation	:		latipes (Orange-red killifish) factor (BCF): 144
	on coefficient: n- bl/water	:	log Pow: 4.63	
deltan	nethrin (ISO):			
Bioaco	cumulation	:		s macrochirus (Bluegill sunfish) factor (BCF): 1,800
	on coefficient: n- bl/water	:	log Pow: 4.6	
Mobili	ty in soil			
<u>Comp</u>	onents:			
doltan	nethrin (ISO):			



## **Deltamethrin Collar**

Version 9.6	Revision Date: 06.04.2024	SDS Number: 85702-00029	Date of last issue: 03.11.2023 Date of first issue: 01.04.2015
Distri	bution among environ-	: log Koc: 7.2	
ment	al compartments		
Othe	r adverse effects		
No da	ata available		
SECTION	13. DISPOSAL CONS	DERATIONS	
Diam			
•	osal methods		
Wast	e from residues	•	e of waste into sewer. accordance with local regulations.
Conta	aminated packaging	dling site for r	ners should be taken to an approved waste han- recycling or disposal. se specified: Dispose of as unused product.

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

#### International Regulations

UNRTDG UN number Proper shipping name Class Subsidiary risk Packing group Labels Environmentally hazardous	 Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable no
IATA-DGR UN/ID No. Proper shipping name Class Subsidiary risk Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passen- ger aircraft)	Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable
IMDG-Code UN number Proper shipping name Class Subsidiary risk Packing group Labels EmS Code Marine pollutant	Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### **National Regulations**



6	06.04.2024	SDS Nun 85702-00		ate of last issue: 03.11.2023 ate of first issue: 01.04.2015
ADG				
-	umber		t applicable	
	er shipping name		applicable	
Class			t applicable	
	idiary risk ng group		t applicable t applicable	
Label			applicable	
	hem Code		applicable	
-	al precautions for ι	1941		
inol du	plicable			
CTION Safety		onmental reg	ulations/legisla	ation specific for the substance or n
Safety ture		n <b>mental reg</b> ns : Sche speci	ulations/legisla	use the original publication to check fo c conditions or threshold limits that mig
Safety ture Thera Standa	<b>r, health and enviro</b>	nmental reg ns : Sche speci apply	ulations/legisla dule 7 (Please u fic uses, specifie	use the original publication to check fo c conditions or threshold limits that mig
Safety ture Thera Standa	<b>y, health and enviro</b> peutic Goods (Poiso ard) Instrument hition/Licensing Requ	nmental reg ns : Sche speci apply irements	ulations/legisla dule 7 (Please u fic uses, specific for this chemica	<ul> <li>use the original publication to check fo c conditions or threshold limits that mig al)</li> <li>There is no applicable prohibition authorisation and restricted use requirements, including for carcin gens referred to in Schedule 10 of the model WHS Act and Regula- tions.</li> </ul>
Safety ture Thera Standa	<b>y, health and enviro</b> peutic Goods (Poiso ard) Instrument hition/Licensing Requ	nmental reg ns : Sche speci apply irements	ulations/legisla dule 7 (Please u fic uses, specific for this chemica	use the original publication to check fo c conditions or threshold limits that mig al) There is no applicable prohibition authorisation and restricted use requirements, including for carcin gens referred to in Schedule 10 c the model WHS Act and Regula-
ECTION Safety ture Thera Stands Prohib	<b>y, health and enviro</b> peutic Goods (Poiso ard) Instrument hition/Licensing Requ	onmental reg ns : Sche speci apply nirements product are r : not de	ulations/legisla dule 7 (Please u fic uses, specific for this chemica	<ul> <li>use the original publication to check fo c conditions or threshold limits that mig al)</li> <li>There is no applicable prohibition authorisation and restricted use requirements, including for carcin gens referred to in Schedule 10 of the model WHS Act and Regula- tions.</li> </ul>

Revision Date Sources of key data used to compile the Safety Data Sheet		06.04.2024 Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/
Date format	:	dd.mm.yyyy
Full text of other abbreviatio	ns	
ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
AU OEL	:	Australia. Workplace Exposure Standards for Airborne Con- taminants.
ACGIH / TWA	:	8-hour, time-weighted average



Version	Revision Date:	SDS Number:	Date of last issue: 03.11.2023
9.6	06.04.2024	85702-00029	Date of first issue: 01.04.2015

#### AU OEL / TWA

: Exposure standard - time weighted average

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; 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

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.

AU / EN