



Vers 4.16		Revision Date: 30.09.2023		S Number: 260-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014
1. PF	RODUC	T AND COMPANY ID	ENT	IFICATION	
	Produc	t name	:	Tildipirosin (18%	) Formulation
	Manufa	acturer or supplier's c	letai	ils	
	Compa	iny	:	MSD	
	Addres	S	:	50 Tuas West Dr Singapore - Sing	
	Teleph	one	:	+1-908-740-4000	)
	Emerg	ency telephone number	• :	65 6697 2111 (24	4/7/365)
	E-mail	address	:	EHSDATASTEW	/ARD@msd.com
	Recom	nmended use of the cl	nem	ical and restriction	ons on use
		mended use tions on use	:	Veterinary produ Not applicable	ct

### 2. HAZARDS IDENTIFICATION

GHS Classification Skin sensitisation	:	Category 1
Reproductive toxicity	:	Category 2
Specific target organ toxicity - repeated exposure	:	Category 2 (Heart, Cardio-vascular system, Nervous system, eye - retina, Thyroid, thymus gland, spleen, Pancreas)
Short-term (acute) aquatic hazard	:	Category 1
Long-term (chronic) aquatic hazard	:	Category 1
GHS label elements		
Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	H317 May cause an allergic skin reaction. H361f Suspected of damaging fertility. H373 May cause damage to organs (Heart, Cardio-vascular





	spleen, Pancreas	s system, eye - retina, Thyroid, thymus gland, s) through prolonged or repeated exposure. to aquatic life with long lasting effects.
tements :	Prevention: P201 Obtain spe P202 Do not han and understood. P260 Do not brea P272 Contamina the workplace. P273 Avoid relea	ecial instructions before use. adle until all safety precautions have been read athe mist or vapours. Ited work clothing should not be allowed out of ase to the environment. Asective gloves/ protective clothing/ eye protec- ion.
	P308 + P313 IF e attention. P333 + P313 If s vice/ attention.	ON SKIN: Wash with plenty of water. exposed or concerned: Get medical advice/ kin irritation or rash occurs: Get medical ad- ke off contaminated clothing and wash it before llage.
	<b>Storage:</b> P405 Store locke	ed up.
	Disposal:	contents/ container to an approved waste
	hich do not re	reuse. P391 Collect spil <b>Storage:</b> P405 Store locke <b>Disposal:</b> P501 Dispose of

None known.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance /	Mixture	:	Mixture

Components
------------

Chemical name	CAS-No.	Concentration (% w/w)
Tildipirosin	328898-40-4	>= 10 -< 20
Citric acid monohydrate	5949-29-1	>= 1 -< 10

#### 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.



Version 4.16	Revision Date: 30.09.2023	SDS Number: 25260-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014			
lf inha	aled		move to fresh air.			
In cas	se of skin contact	of water. Remove con Get medical Wash clothir	ontact, immediately flush skin with soap and plenty ataminated clothing and shoes.			
In cas	se of eye contact	: Flush eyes v	vith water as a precaution. attention if irritation develops and persists.			
lf swa	allowed	: If swallowed Get medical	, DO NOT induce vomiting.			
	important symptoms effects, both acute and red	<ul> <li>May cause an allergic skin reaction.</li> <li>Suspected of damaging fertility.</li> <li>May cause damage to organs through prolonged or repeated exposure.</li> </ul>				
	ction of first-aiders	: First Aid resp and use the when the po	ponders should pay attention to self-protection, recommended personal protective equipment tential for exposure exists (see section 8).			
	s to physician GHTING MEASURES	: Treat sympto	omatically and supportively.			
Suita	ble extinguishing media	: Water spray Alcohol-resis Carbon diox Dry chemica	ide (CO2)			
Unsu media	itable extinguishing	: None known				
	ific hazards during fire-	: Exposure to	combustion products may be a hazard to health.			
	rdous combustion prod-	: Carbon oxid	es			
Spec ods	ific extinguishing meth-	cumstances Use water sp	shing measures that are appropriate to local cir- and the surrounding environment. oray to cool unopened containers. lamaged containers from fire area if it is safe to do			
	ial protective equipment efighters	: In the event	of fire, wear self-contained breathing apparatus. al protective equipment.			

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- :	Use personal protective equipment.
tive equipment and emer-	Follow safe handling advice (see section 7) and personal pro-
gency procedures	tective 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



Versior 4.16	n Revision Date: 30.09.2023	SDS Number: 25260-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014
Methods and materials for containment and cleaning up		<ul> <li>Local authoritie cannot be continued : Soak up with in For large spills ment to keep r be pumped, st Clean up rema bent.</li> <li>Local or nation posal of this m employed in th mine which reg Sections 13 ar</li> </ul>	pose of contaminated wash water. es should be advised if significant spillages tained. nert absorbent material. s, provide dyking or other appropriate contain- naterial from spreading. If dyked material can ore recovered material in appropriate container. aining materials from spill with suitable absor- nal regulations may apply to releases and dis- naterial, as well as those materials and items the cleanup of releases. You will need to deter- gulations are applicable. Ind 15 of this SDS provide information regarding r national requirements.
7. HAN	IDLING AND STORAGE		
Te	echnical measures		ng measures under EXPOSURE PERSONAL PROTECTION section.
	cal/Total ventilation	: Use only with a	adequate ventilation.
Ac	dvice on safe handling	Do not breathe Do not swallow Avoid contact Handle in acco practice, based sessment	
Co	onditions for safe storage	: Keep in proper Store locked u	rly labelled containers. p. dance with the particular national regulations.
Ma	aterials to avoid		ith the following product types:

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters					
Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis	
Tildipirosin	328898-40-4	TWA	100 µg/m3 (OEB 2)	Internal	
Further information: DSEN					
		Wipe limit	100 µg/100 cm <sup>2</sup>	Internal	





Version 4.16	Revision Date: 30.09.2023		DS Number: 5260-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014	
Eng	ineering measures	:		ventilation, especially in confined areas. ce exposure concentrations.	
Pers	sonal protective equipn	nent			
	Filter type Hand protection		: If adequate local exhaust ventilation is not available or ex sure assessment demonstrates exposures outside the re		
			ommended guide Particulates type	lines, use respiratory protection.	
Ν	<i>M</i> aterial	:	Chemical-resistar	nt gloves	
F	Remarks		on the concentrat stance and specif determined for the applications, we r chemicals of the a	protect hands against chemicals depending tion and quantity of the hazardous sub- fic to place of work. Breakthrough time is not e product. Change gloves often! For special recommend clarifying the resistance to aforementioned protective gloves with the rer. Wash hands before breaks and at the	
Eye	protection	:	Wear the following personal protective equipment: Safety glasses		
Skin	Skin and body protection		Select appropriat resistance data a potential. Skin contact mus	e protective clothing based on chemical nd an assessment of the local exposure t be avoided by using impervious protective aprons, boots, etc).	
Hyg	iene measures	:	If exposure to che eye flushing syste ing place. When using do no Contaminated wo workplace.	emical is likely during typical use, provide ems and safety showers close to the work- ot eat, drink or smoke. ork clothing should not be allowed out of the ted clothing before re-use.	
9. PHYS	ICAL AND CHEMICAL F	RO	PERTIES		
Арр	earance	:	liquid		

Appearance	•	ilquid
Colour	:	No data available
Odour	:	No data available
Odour Threshold	:	No data available
рН	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling	:	No data available



Version 4.16	Revision Date: 30.09.2023		S Number: 260-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014
range	9			
Flash	n point	:	No data available	9
Evap	oration rate	:	No data available	e
Flam	mability (solid, gas)	:	Not applicable	
Flam	mability (liquids)	:	No data available	e
	er explosion limit / Upper nability limit	:	No data available	9
	er explosion limit / Lower nability limit	:	No data available	9
Vapo	our pressure	:	No data available	e
Relat	tive vapour density	:	No data available	e
Relat	tive density	:	No data available	e
	bility(ies) /ater solubility	:	soluble	
	tion coefficient: n-	:	No data available	9
	nol/water -ignition temperature	:	No data available	9
Deco	emposition temperature	:	No data available	9
Visco Vi	osity iscosity, dynamic	:	No data available	e
Vi	iscosity, kinematic	:	No data available	e
Explo	osive properties	:	Not explosive	
Oxidi	izing properties	:	The substance o	r mixture is not classified as oxidizing.
Mole	cular weight	:	No data available	e
Partie	cle size	:	No data available	e

## 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac-	:	Can react with strong oxidizing agents.
tions		





Version 4.16	Revision Date: 30.09.2023		9S Number: 260-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014
Incom	itions to avoid apatible materials rdous decomposition cts	:	None known. Oxidizing agents No hazardous de	ecomposition products are known.
11. TOXIC	OLOGICAL INFORMAT	101	N	
Inforn expos	nation on likely routes of sure	:	Inhalation Skin contact Ingestion Eye contact	
	e toxicity assified based on availa	ble	information.	
<u>Comp</u>	oonents:			
-	birosin:			
Acute	oral toxicity	:	LD50 (Rat): > 2,0	00 mg/kg
			LD50 (Mouse): >	2,000 mg/kg
Acute	dermal toxicity	:	Remarks: No data	a available
	toxicity (other routes of histration)	:	LD50 (Mouse): 6. Application Route	
Citric	acid monohydrate:			
	oral toxicity	:	LD50 (Mouse): 5,-	400 mg/kg
Acute	dermal toxicity	:	LD50 (Rat): > 2,00 Method: OECD To Assessment: The toxicity	
-	corrosion/irritation assified based on availa	ble	information.	
Com	oonents:			
<b>Tildip</b> Speci Resul		:	Rabbit No skin irritation	
Citric	acid monohydrate:			

Species	:	Rabbit
Result	:	No skin irritation

#### Serious eye damage/eye irritation

Not classified based on available information.



ersion 16	Revision Date: 30.09.2023		0S Number: 260-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014
Com	oonents:			
	birosin:			
Speci			Rabbit	
Resul		:	No eye irritation	
Citric	acid monohydrate:			
Speci		:	Rabbit	
Resul	t	:	Irritation to eyes	reversing within 21 days
Resp	iratory or skin sensi	tisatio	on	
-	sensitisation			
•	ause an allergic skin	reaction	on.	
•	iratory sensitisation assified based on ava	ilable	information.	
Comp	oonents:			
Tildin	birosin:			
Test 1		:	Maximisation Te	st
Expos	sure routes	:	Dermal	
Speci Resul		:	Guinea pig Sensitiser	
Resul	l	•	Jensilisei	
	cell mutagenicity			
	assified based on ava	ilable	information.	
	oonents:			
•	birosin:		Test Tune, Post	vial reverse mutation appart (AMES)
Geno	toxicity in vitro	:	Metabolic activa	erial reverse mutation assay (AMES)
				tion: with and without metabolic activatio
			Result: negative	tion: with and without metabolic activatio
			-	tion: with and without metabolic activatio
			Test Type: Chro Test system: Hu	mosomal aberration man lymphocytes
			Test Type: Chro Test system: Hu	mosomal aberration man lymphocytes
			Test Type: Chro Test system: Hu Metabolic activa Result: negative	mosomal aberration man lymphocytes tion: with and without metabolic activatio
			Test Type: Chro Test system: Hu Metabolic activa Result: negative Test Type: In viti Test system: mo	mosomal aberration man lymphocytes tion: with and without metabolic activatio ro mammalian cell gene mutation test use lymphoma cells
			Test Type: Chro Test system: Hu Metabolic activa Result: negative Test Type: In viti Test system: mo	mosomal aberration man lymphocytes tion: with and without metabolic activatio ro mammalian cell gene mutation test use lymphoma cells
Geno	toxicity in vivo	:	Test Type: Chro Test system: Hu Metabolic activa Result: negative Test Type: In vit Test system: mo Metabolic activa Result: negative	mosomal aberration man lymphocytes tion: with and without metabolic activatio ro mammalian cell gene mutation test use lymphoma cells tion: with and without metabolic activatio
Geno	toxicity in vivo	:	Test Type: Chro Test system: Hu Metabolic activa Result: negative Test Type: In viti Test system: mo Metabolic activa	mosomal aberration man lymphocytes tion: with and without metabolic activatio ro mammalian cell gene mutation test use lymphoma cells tion: with and without metabolic activatio





Version 4.16	Revision Date: 30.09.2023	SDS Nu 25260-0		Date of last issue: 04.04.2023 Date of first issue: 24.10.2014
	acid monohydrate: toxicity in vitro	Res Test	ult: negativ	vitro micronucleus test
Geno	toxicity in vivo	Res : Test cyto Spe App	ult: negativ t Type: Mu genetic tes cies: Rat	tagenicity (in vivo mammalian bone-marrow st, chromosomal analysis) ute: Ingestion
Not c <b>Repr</b> e	i <b>nogenicity</b> lassified based on ava <b>oductive toxicity</b> ected of damaging fert		nation.	
Com	ponents:	·		
-	<b>birosin:</b> ts on fertility	Spe App Gen Sym	cies: Rat lication Ro eral Toxici ptoms: Eff	o-generation reproduction toxicity study ute: Oral ty F1: LOAEL: 80 mg/kg body weight fects on F1 offspring on reproduction parameters
Effect ment	ts on foetal develop-	Spe Emt Sym Res	cies: Rabb oryo-foetal optoms: Re ult: No tera	bryo-foetal development hit, females toxicity: NOAEL: 30 mg/kg body weight educed body weight atogenic potential effects were seen only at maternally toxic dos-
		Spe Emt Sym Res	cies: Rat, f pryo-foetal ptoms: Re ult: No tera	bryo-foetal development female toxicity: NOAEL: 30 mg/kg body weight educed body weight atogenic potential effects were seen only at maternally toxic dos-
Repro sessr	oductive toxicity - As- nent			e of adverse effects on sexual function and on animal experiments.

Citric acid monohydrate:



	Species: Rat Application Re Result: negation able information. : May cause re s (Heart, Cardio-vas Pancreas) through p	nbryo-foetal development oute: Ingestion ive spiratory irritation. scular system, Nervous system, eye - retina, Th orolonged or repeated exposure.
ingle exposure ified based on availa ents: id monohydrate: ent epeated exposure se damage to organs hus gland, spleen, P ents: sin:	Species: Rat Application Re Result: negation able information. : May cause re s (Heart, Cardio-vas Pancreas) through p	oute: Ingestion ive spiratory irritation. scular system, Nervous system, eye - retina, Th prolonged or repeated exposure.
ified based on availa ents: d monohydrate: ent epeated exposure be damage to organs hus gland, spleen, P ents: sin:	able information. : May cause re s (Heart, Cardio-vae Pancreas) through p	spiratory irritation. scular system, Nervous system, eye - retina, Th rolonged or repeated exposure.
ified based on availa ents: d monohydrate: ent epeated exposure be damage to organs hus gland, spleen, P ents: sin:	: May cause re s (Heart, Cardio-vae Pancreas) through p	scular system, Nervous system, eye - retina, Th prolonged or repeated exposure.
<b>d monohydrate:</b> ent epeated exposure se damage to organs hus gland, spleen, P ents: sin:	s (Heart, Cardio-vas Pancreas) through p	scular system, Nervous system, eye - retina, Th prolonged or repeated exposure.
ent epeated exposure se damage to organs hus gland, spleen, P ents: sin:	s (Heart, Cardio-vas Pancreas) through p	scular system, Nervous system, eye - retina, Th prolonged or repeated exposure.
epeated exposure se damage to organs nus gland, spleen, P ents: sin:	s (Heart, Cardio-vas Pancreas) through p	scular system, Nervous system, eye - retina, Th prolonged or repeated exposure.
e damage to organs nus gland, spleen, P <u>ents:</u> sin:	Pancreas) through p	prolonged or repeated exposure.
nus gland, spleen, P <u>ents:</u> sin:	Pancreas) through p	prolonged or repeated exposure.
sin:	: Heart Cardio	-vascular system. Nervous system, eve - retina
	: Heart Cardio	-vascular system. Nervous system, eve - retina
gans	: Heart Cardio	-vascular system Nervous system eve - retina
		ius gland, spleen, Pancreas
ent		amage to organs through prolonged or repeated
d dose toxicity		
ents:		
sin:		
	: Rat	
n Douto		
		is aland
S	: Salivation	
	: Dog	
		I nonvoue avetem Pland
S	: Tremors	i hervous system, blood
	: Dog	
_	: 6 mg/kg	
	: Oral	
		vegeuler eveter
		-vascular system
	ent d dose toxicity ents: sin: on Route time gans s	Thyroid, thym ent : May cause da exposure. d dose toxicity ents: sin: : Rat : 20 mg/kg : 60 mg/kg : 60 mg/kg : 60 mg/kg : 90 d : gans : spleen, thymu s : Salivation : Dog : 20 mg/kg : 20 mg/kg : 0ral time : 28 d : and time : 20 mg/kg : and time : 28 d : and time : 28 d : and time : 28 d : and time : 20 mg/kg : and time : 28 d : and time : 28 d : and time : 28 d : and time : 28 d : and time : 20 mg/kg : and time : 20 mg/kg : and time : 28 d : and time : 20 mg/kg : and time : 28 d : and time : 30 d : and time :





rsion I6	Revision Date: 30.09.2023		DS Number: 260-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014
Speci	es	:	Dog	
NOAE	EL	:	10 mg/kg	
	L ation Route	÷	50 mg/kg Oral	
	sure time	÷	55 Weeks	
Targe	t Organs	:	Nervous system gland, Pancreas	n, eye - retina, Heart, Thyroid, spleen, thymu s
Citric	acid monohydrate:			
Speci		:	Rat	
NOAE LOAE		÷	4,000 mg/kg 8,000 mg/kg	
Applic	ation Route	:	Ingestion	
Expos	sure time	:	10 Days	
•	<b>ation toxicity</b> assified based on availa	ble	information.	
Expe	rience with human exp	osi	ure	
-	rience with human exp ponents:	osi	ıre	
Comp	oonents:	osi	ıre	
<u>Comp</u> Tildip	-	iosi :		mation is available.
Comp Tildip Gener	oonents: irosin:	:		mation is available.
Comp Tildip Gener	oonents: irosin: ral Information	:		mation is available.
Comp Tildip Gener . ECOLO	oonents: irosin: ral Information DGICAL INFORMATION	:		mation is available.
<u>Comp</u> Tildip Gener . ECOLO Ecoto <u>Comp</u> Tildip	oonents: irosin: ral Information DGICAL INFORMATION exicity ponents: irosin:	:		mation is available.
<u>Comp</u> Tildip Gener . ECOLO Ecoto <u>Comp</u> Tildip	oonents: irosin: ral Information OGICAL INFORMATION exicity ponents:	:	No human infor	les promelas (fathead minnow)): > 138 mg/l
<u>Comp</u> Tildip Gener . ECOLO Ecoto <u>Comp</u> Tildip	oonents: irosin: ral Information DGICAL INFORMATION exicity ponents: irosin:	: N	No human infor LC50 (Pimepha Exposure time:	les promelas (fathead minnow)): > 138 mg/l
Comp Tildip Gener ECOLO Ecoto <u>Comp</u> Tildip Toxici	oonents: irosin: ral Information OGICAL INFORMATION exicity conents: irosin: ty to fish	: <b>N</b> :	No human infor LC50 (Pimepha Exposure time: Method: OECD	les promelas (fathead minnow)): > 138 mg/l 96 h Test Guideline 203
Comp Tildip Gener ECOLO Ecoto Comp Tildip Toxici	ponents: irosin: ral Information DGICAL INFORMATION exicity ponents: irosin: ty to fish ty to daphnia and other	: <b>N</b> :	No human infor LC50 (Pimepha Exposure time: Method: OECD EC50 (Daphnia	les promelas (fathead minnow)): > 138 mg/l 96 h Test Guideline 203 magna (Water flea)): 32 mg/l
Comp Tildip Gener ECOLO Ecoto Comp Tildip Toxici	oonents: irosin: ral Information OGICAL INFORMATION exicity conents: irosin: ty to fish	: <b>N</b> :	No human infor LC50 (Pimepha Exposure time: Method: OECD EC50 (Daphnia Exposure time:	les promelas (fathead minnow)): > 138 mg/l 96 h Test Guideline 203 magna (Water flea)): 32 mg/l
Comp Tildip Gener Ecoto Comp Tildip Toxici aquat	ponents: irosin: ral Information DGICAL INFORMATION oxicity ponents: irosin: ty to fish ty to daphnia and other ic invertebrates	: <b>N</b> :	No human inform LC50 (Pimepha Exposure time: Method: OECD EC50 (Daphnia Exposure time: Method: OECD	les promelas (fathead minnow)): > 138 mg/l 96 h Test Guideline 203 magna (Water flea)): 32 mg/l 48 h Test Guideline 202
Comp Tildip Gener Ecoto Comp Tildip Toxici aquat	ponents: irosin: ral Information DGICAL INFORMATION points: ponents: irosin: ty to fish ty to daphnia and other ic invertebrates ty to algae/aquatic	: <b>N</b> :	No human inform LC50 (Pimepha Exposure time: Method: OECD EC50 (Daphnia Exposure time: Method: OECD EC50 (Pseudok mg/l	les promelas (fathead minnow)): > 138 mg/l 96 h Test Guideline 203 magna (Water flea)): 32 mg/l 48 h Test Guideline 202 irchneriella subcapitata (green algae)): 0.12
Comp Tildip Gener Ecoto Comp Tildip Toxici aquati	ponents: irosin: ral Information DGICAL INFORMATION points: ponents: irosin: ty to fish ty to daphnia and other ic invertebrates ty to algae/aquatic	: <b>N</b> :	No human inform LC50 (Pimepha Exposure time: Method: OECD EC50 (Daphnia Exposure time: Method: OECD EC50 (Pseudok mg/l Exposure time:	les promelas (fathead minnow)): > 138 mg/l 96 h Test Guideline 203 magna (Water flea)): 32 mg/l 48 h Test Guideline 202 irchneriella subcapitata (green algae)): 0.12 72 h
Comp Tildip Gener Ecoto Comp Tildip Toxici aquati	ponents: irosin: ral Information DGICAL INFORMATION points: ponents: irosin: ty to fish ty to daphnia and other ic invertebrates ty to algae/aquatic	: <b>N</b> :	No human inform LC50 (Pimepha Exposure time: Method: OECD EC50 (Daphnia Exposure time: Method: OECD EC50 (Pseudok mg/l Exposure time:	les promelas (fathead minnow)): > 138 mg/l 96 h Test Guideline 203 magna (Water flea)): 32 mg/l 48 h Test Guideline 202 irchneriella subcapitata (green algae)): 0.12
Comp Tildip Gener Ecoto Comp Tildip Toxici aquati	ponents: irosin: ral Information DGICAL INFORMATION points: ponents: irosin: ty to fish ty to daphnia and other ic invertebrates ty to algae/aquatic	: <b>N</b> :	No human inform LC50 (Pimepha Exposure time: Method: OECD EC50 (Daphnia Exposure time: Method: OECD EC50 (Pseudok mg/l Exposure time: Method: OECD NOEC (Pseudok	les promelas (fathead minnow)): > 138 mg/l 96 h Test Guideline 203 magna (Water flea)): 32 mg/l 48 h Test Guideline 202 irchneriella subcapitata (green algae)): 0.12 72 h
Comp Tildip Gener Ecoto Comp Tildip Toxici aquati	ponents: irosin: ral Information DGICAL INFORMATION points: ponents: irosin: ty to fish ty to daphnia and other ic invertebrates ty to algae/aquatic	: <b>N</b> :	No human inform LC50 (Pimepha Exposure time: Method: OECD EC50 (Daphnia Exposure time: Method: OECD EC50 (Pseudok mg/l Exposure time: Method: OECD	les promelas (fathead minnow)): > 138 mg/l 96 h Test Guideline 203 magna (Water flea)): 32 mg/l 48 h Test Guideline 202 irchneriella subcapitata (green algae)): 0.12 72 h Test Guideline 201 kirchneriella subcapitata (green algae)): 0.04





Version 4.16	Revision Date: 30.09.2023		0S Number: 260-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014
			Exposure time:	a flos-aquae (cyanobacterium)): 0.027 mg/l 72 h Test Guideline 201
			mg/l Exposure time:	na flos-aquae (cyanobacterium)): 0.00011 72 h Test Guideline 201
	ctor (Acute aquatic tox-	:	10	
	tor (Chronic aquatic	:	100	
	toxicity) Toxicity to microorganisms			
Citric	acid monohydrate:			
	ty to fish	:	LC50 (Pimepha Exposure time:	les promelas (fathead minnow)): > 100 mg/l 96 h
	ty to daphnia and other c invertebrates	:	EC50 (Daphnia Exposure time:	magna (Water flea)): 1,535 mg/l 24 h
Persis	stence and degradabil	ity		
Comp	onents:			
Tildip	irosin:			
Biode	gradability	:	Biodegradation: Exposure time:	
Citric	acid monohydrate:			
Biode	gradability	:	Result: Readily Biodegradation: Exposure time: Method: OECD	97 %



Version 4.16			8 Number: 60-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014
Comp	cumulative potential ponents:			
Partiti	acid monohydrate: on coefficient: n- ol/water	:	og Pow: -1.72	
	<b>ity in soil</b> ta available			
	adverse effects ta available			
13. DISPO	SAL CONSIDERATION	IS		
Dispo	sal methods			
-	e from residues	: 1	Do not dispose of	waste into sewer.
Conta	minated packaging	<ul> <li>Dispose of in accordance with local regulations.</li> <li>Empty containers should be taken to an approved dling site for recycling or disposal.</li> <li>If not otherwise specified: Dispose of as unused particular statements.</li> </ul>		should be taken to an approved waste han- ling or disposal.
14. TRANS	SPORT INFORMATION			
Intern	ational Regulations			
UNRT UN nu Prope		:   	N.O.S.	LLY HAZARDOUS SUBSTANCE, LIQUID,
Class			(Tildipirosin) 9	
Packi	ng group	: 1	III	
Labels Enviro	s onmentally hazardous		9 yes	
	-			
UN/ID Prope	r shipping name	: 1	UN 3082 Environmentally h (Tildipirosin)	azardous substance, liquid, n.o.s.
Class			9	
Packii Labels	ng group s		III Miscellaneous	
	ng instruction (cargo		964	
ger ai			964	
	onmentally hazardous	: }	yes	
<b>IMDG</b> UN ու	-Code	• 1	UN 3082	
	r shipping name			LLY HAZARDOUS SUBSTANCE, LIQUID,



Version 4.16	Revision Date: 30.09.2023	SDS Number: 25260-00025	Date of last issue: 04.04.2023 Date of first issue: 24.10.2014
		N.O.S. (Tildipirosin)	

	(Tildipirosin
:	9
:	
:	9
:	F-A, S-F
:	yes
	:

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

Not applicable for product as supplied.

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **15. REGULATORY INFORMATION**

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

# Workplace Safety and Health Act and Workplace Safety and Health (General Provisions) Regulations: This product is subjected to the SDS, labelling, PEL and other requirements in the Act/Regulations.

Environmental Protection and Management Act and Environmental Protection and Management (Hazard- ous Substances) Regulations	:	Not applicable	
Fire Safety (Petroleum and Flammable Materials)	:	Not applicable	

Regulations

#### The components of this product are reported in the following inventories:

AICS	:	not determined
DSL	:	not determined
IECSC	:	not determined

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

Revision Date	:	30.09.2023
Further information		
Sources of key data used to compile the 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/
Date format	:	dd.mm.yyyy



Version	Revision Date:	S
4.16	30.09.2023	2

SDS Number: 25260-00025

Date of last issue: 04.04.2023 Date of first issue: 24.10.2014

#### Full text of other abbreviations

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.

SG / EN