according to Regulation (EC) No. 1907/2006

VERBEN™

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Corteva Agriscience[™] encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of Lithuania and may not meet the regulatory requirements in other countries.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name	: VERBEN™
Unique Formula Identifier (UFI)	: 37RA-R00R-K00S-2NYS

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub-	:	Fungicide
stance/Mixture		

1.3 Details of the supplier of the safety data sheet

COMPANY IDENTIFICATION

Manufacturer/importer Corteva Agriscience Denmark A/S Langebrogade 3H DK – 1411 Copenhagen K DENMARK

Customer Information	:	+45 45 28 08 00
Number		
E-mail address	:	SDS@corteva.com

Distributor / Supplier

Corteva Agriscience Lithuania Spaces

Customer Information : +370 5 2100260 Number

1.4 Emergency telephone number

SGS +32 3 575 55 55 OR

+370 5214 0490

Poison information center: 8-5 236 20 52

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2	l
Skin sensitisation, Category 1	I
Carcinogenicity, Category 2	l
Short-term (acute) aquatic hazard, Cate-	l
gory 1	
Long-term (chronic) aquatic hazard, Cat-	I
egory 1	(

H319: Causes serious eye irritation.H317: May cause an allergic skin reaction.H351: Suspected of causing cancer.H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	 H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H351 Suspected of causing cancer. H410 Very toxic to aquatic life with long lasting effects.
Supplemental Hazard Statements	:	EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
P20 P26 P28		 Prevention: P201 Obtain special instructions before use. P261 Avoid breathing mist/vapours/spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
		Response:P308 + P313In case of exposure or suspected exposure:seek medical adviceP333 + P313If skin irritation or rash occurs: Get medicaladvice/ attention.P337/P313If eye irritation persists: Get medical attention.P361 + P364Take off immediately all contaminated clothingand wash it before reuse.P391Collect spillage.
		Disposal: P501 Remove the container in accordance with national legislation.

SP 1 Do not contaminate water with the product or its container (Do not clean application equipment near surface wa-



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ter/Avoid contamination via drains from farmyards and roads). SPe3 In order to protect aquatic organisms, it is necessary to maintain a 5-meter protection zone and a 10-meter protection zone planted with perennial plants up to surface water bodiesand drainage ditches.

Hazardous components which must be listed on the label:

Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S)proquinazid (ISO)

Additional Labelling

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 2%

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No.	Classification	Concentration (% w/w)
	Index-No.		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	REACH Registration		
	number		
prothioconazole (ISO)	178928-70-6	Aquatic Acute 1; H400	18,9
	613-337-00-9	Aquatic Chronic 1;	
		H410	
		M-Factor (Acute	-
		aquatic toxicity): 10	
		M-Factor (Chronic	
		aquatic toxicity): 1	
proquinazid (ISO)	189278-12-4	Carc. 2; H351	4,73
, - , - , - , - , - , - , - , - , - , -		Aquatic Acute 1;	, -
	616-211-00-1	H400	
		Aquatic Chronic 1;	
		H410	



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			M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 10	
	noic acid, 2-hydroxy-, 2 exyl ester, (2S)-	- 186817-80-1 01-2119516238	Skin Irrit. 2; H315 Eye Irrit. 2; H319 3-41 Skin Sens. 1B; H317	>= 40 - < 50
	thylene glycol (tristyrylphenyl)ether	99734-09-5	Aquatic Chronic 3; H412	>= 10 - < 20
	volumethyldecan-1-amide	14433-76-2 238-405-1 01-2119485027	7-36 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system) Aquatic Chronic 2; H411	>= 10 - < 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Never give anything by mouth to an unconscious person.
If inhaled	:	Move to fresh air. Artificial respiration and/or oxygen may be necessary. Consult a physician after significant exposure.
In case of skin contact	:	Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions see a physi- cian. Wash contaminated clothing before re-use.
In case of eye contact	:	If easy to do, remove contact lens, if worn. Hold eye open and rinse slowly and gently with water for 15- 20 minutes. If eye irritation persists, consult a specialist.
If swallowed	:	Obtain medical attention. DO NOT induce vomiting unless directed to do so by a physi- cian or poison control center. If victim is conscious: Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	:	No cases of human intoxication are known and the symptoms
		of experimental intoxication are not known.



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4.3	Indicati Treatm	-	meo :	dical attention and Treat symptomati	d special treatment needed cally.
SE	CTION	5: Firefighting meas	sur	es	
5.1	Extinau	iishing media			
	-	e extinguishing media	:	Water spray Alcohol-resistant	foam
	Unsuita media	able extinguishing	:	None known.	
5.2	Special	hazards arising from	the	e substance or mi	xture
	Specifi fighting	c hazards during fire-]	:		bustion products may be a hazard to health. off from fire fighting to enter drains or water
	Hazaro ucts	dous combustion prod-	:	Nitrogen oxides (l Carbon oxides	NOx)
5.3	Advice	for firefighters			
	Specia	l protective equipment fighters	:		e, wear self-contained breathing apparatus. tective equipment.
	Specifi ods	c extinguishing meth-	:	so. Evacuate area. Use extinguishing cumstances and	ged containers from fire area if it is safe to do measures that are appropriate to local cir- the surrounding environment. o cool unopened containers.
	Furthe	r information	:	Collect contamina must not be disch Fire residues and	ated fire extinguishing water separately. This arged into drains. contaminated fire extinguishing water must accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Ensure adequate ventilation. Use personal protective equipment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
6.2 Environmental precautions		
Environmental precautions	:	If the product contaminates rivers and lakes or drains inform respective authorities. Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so.

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		barriers). Retain and dis Local authoriti cannot be con Prevent from e	ding over a wide area (e.g. by containment or oil spose of contaminated wash water. es should be advised if significant spillages tained. entering into soil, ditches, sewers,underwater. 2, Ecological Information.
6.3 Metho	ods and material for c	ontainment and clea	aning up
Meth	6.3 Methods and material for conta Methods for cleaning up :		aining materials from spill with suitable absorb- nal regulations may apply to releases and dis- naterial, as well as those materials and items s, provide dyking or other appropriate contain- material from spreading. If dyked material can aterial should be stored in a vented container. c prevent the ingress of water as further reaction aterials can take place which could lead to over- of the container. le, closed containers for disposal. absorbent material (e.g. cloth, fleece). nert absorbent material (e.g. sand, silica gel, niversal binder, sawdust). 3, Disposal Considerations, for additional infor-

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	 Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Do not breathe vapours/dust. Do not smoke. Handle in accordance with good industrial hygiene and safety practice. Avoid exposure - obtain special instructions before use. Smoking, eating and drinking should be prohibited in the application area. Do not get on skin or clothing. Avoid inhalation of vapour or mist. Do not get in eyes. Avoid contact with skin and eyes. Take care to prevent spills, waste and minimize release to the environment.
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Hygiene measures		:	Use appropriate safety equipment. For additional information refer to Section 8, Exposure Controls and Personal Protectio : Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and cloth ing. Keep working clothes separately. Contaminated work clothing should not be allowed out of the workplace. Wash hands and face before breaks and immediately after handling the product.		
7.2 0	Conditi	ons for safe storage,	inc	luding any incom	patibilities
Requirements for storage areas and containers		:	Store in a closed container. Containers which are opened must be carefully resealed and kept upright to prevent leak age. Keep in properly labelled containers. Store in accorda with the particular national regulations.		
	Advice	on common storage	:	Do not store near Strong oxidizing a	
	Packa	ging material	:	Unsuitable mater	ial: None known.
7.3 S	Specifie	c end use(s)			
Specific use(s)		:	Plant protection p 1107/2009.	products subject to Regulation (EC) No	

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas. Use sufficient ventilation to keep employee exposure below recommended limits.

Personal protective equipment

Eye protection : Hand protection	Safety glasses with side-shields conforming to EN166 Additionally wear a face shield where the possibility exists for face contact due to splashing, spraying or airborne contact with this material.
·	
Remarks :	The selected protective gloves have to satisfy the specifica- tions of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Skin and body protection :	Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.
Respiratory protection :	Manufacturing and processing work: Half mask with vapour filter A1 (EN 141)



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Prote	ective measures	to the concentr at the specific All chemical pr prior to use. Cl	otective equipment must be selected according ation and amount of the dangerous substance workplace. otective clothing should be visually inspected othing and gloves should be replaced in case physical damage or if contaminated.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Colour Odour Odour Threshold	:	liquid clear, yellow mild not determined
Boiling point/boiling range	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	> 100 °C Method: ASTM D 93
Auto-ignition temperature	:	Not applicable
рН	:	4,99 (21,1 °C) Concentration: 10 g/L Method: CIPAC MT 75.3
Viscosity Viscosity, dynamic	:	128,4 mPa.s (20 °C)
Viscosity, kinematic	:	No data available
Solubility(ies) Water solubility	:	emulsifiable
Partition coefficient: n- octanol/water	:	Not applicable
Vapour pressure	:	No data available
Density	:	1,056 g/cm3 (20 °C) Method: OECD Test Guideline 109
Bulk density	:	0,49 g/cm3Not applicable
Relative vapour density	:	No data available

9.2 Other information

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Explo	sives	: Not explo	sive
Oxidizing properties		: The subs	ance or mixture is not classified as oxidizing.
Self-i	gnition	: 264 °C	
Surfa	ce tension	: No data a	vailable

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

No decomposition if stored and applied as directed. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	: Stable under recommended storage conditions.
	No hazards to be specially mentioned.
	None known.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Strong acids

Strong bases

10.6 Hazardous decomposition products

Carbon oxides

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

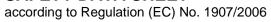
Acute toxicity

Product:

Acute oral toxicity	:	LD50 (Rat, female): > 2.000 - < 5.000 mg/kg Method: OECD Test Guideline 425
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 5,3 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403
Acute dermal toxicity	:	LD50 (Rat, female): > 2.000 mg/kg Method: OECD Test Guideline 402



ersion)	Revision Date: 09.03.2023		OS Number: 0080006459	Date of last issue: - Date of first issue: 09.03.2023
<u>Com</u>	oonents:			
proth	ioconazole (ISO):			
Acute	oral toxicity	:	LD50 (Rat): > 6 Method: OPPT	
Acute	inhalation toxicity	:	tion toxicity	4 h
Acute	e dermal toxicity	:	LD50 (Rabbit): Method: OPPT Assessment: T toxicity	
proq	uinazid (ISO):			
	oral toxicity	:		e): > 5.000 mg/kg Test Guideline 401
				ale): 4.846 mg/kg Test Guideline 401
Acute	inhalation toxicity	:	Exposure time: Test atmosphe Method: OECD Symptoms: No	
Acute	e dermal toxicity	:	LD50 (Rat): > 5 Method: OECD	5.000 mg/kg Test Guideline 402
Propa	anoic acid, 2-hydrox	у-, 2-е	thylhexyl ester	, (2S)-:
Acute	e oral toxicity	:	Symptoms: No	e and female): > 2.000 mg/kg deaths occurred at this concentration. he substance or mixture has no acute oral to>
Acute	inhalation toxicity	:	adverse effects	osure may cause irritation to upper respiratory
			Exposure time: Test atmosphe	





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Poly	ethylene glycol mon	o(tristyrylphenyl)eth	ner:			
Acute	e oral toxicity	Method: Estir	 LD50 (Rat): > 5.000 mg/kg Method: Estimated. Remarks: Typical for this family of materials. 			
Acute dermal toxicity		toxicity				
N,N-I	Dimethyldecan-1-am	ide:				
Acute	e oral toxicity	: LD50 (Rat, m	ale and female): > 2.000 - 5.000 mg/kg			
Acute	e inhalation toxicity	Exposure tim Test atmosph Assessment: tion toxicity	ale and female): > 3,551 mg/l e: 4 h lere: dust/mist The substance or mixture has no acute inhala- ximum attainable concentration.			
Acute	e dermal toxicity	: LD50 (Rat): >	LD50 (Rat): > 2.000 - 5.000 mg/kg			
Skin	corrosion/irritation					
Prod	uct:					
Product:Species:Exposure time:Method:Result:						
Expo Meth	sure time od	: Rabbit : 72 h : OECD Test G : No skin irritat				
Expo Meth Resu	sure time od	: 72 h : OECD Test G				
Expo Meth Resu <u>Com</u>	sure time od It	: 72 h : OECD Test G				
Expo Meth Resu <u>Com</u>	sure time od lit <u>ponents:</u> nioconazole (ISO): ies	: 72 h : OECD Test G	ion			
Expo Meth Resu <u>Com</u> proth Spec Resu	sure time od lit <u>ponents:</u> nioconazole (ISO): ies	: 72 h : OECD Test G : No skin irritat : Rabbit	ion			
Expo Meth Resu Com proth Spec Resu proq Spec	sure time od Ilt ponents: nioconazole (ISO): ies Ilt uinazid (ISO): ies	 72 h OECD Test G No skin irritat Rabbit No skin irritat 	ion			
Expo Meth Resu Com proth Spec Resu proq	sure time od llt ponents: nioconazole (ISO): ies llt uinazid (ISO): ies od	 72 h OECD Test G No skin irritat Rabbit No skin irritat 	ion ion Guideline 404			
Expo Meth Resu Com proth Spec Resu proq Spec Meth Resu	sure time od lit ponents: nioconazole (ISO): ies lit uinazid (ISO): ies od lit	 72 h OECD Test G No skin irritat Rabbit No skin irritat Rabbit OECD Test G No skin irritat 	ion ion Guideline 404 ion			
Expo Meth Resu Com proth Spec Resu proq Spec Meth Resu	sure time od lit ponents: nioconazole (ISO): ies lit uinazid (ISO): ies od lit anoic acid, 2-hydrox	 72 h OECD Test G No skin irritat Rabbit No skin irritat Rabbit OECD Test G No skin irritat 	ion ion Guideline 404 ion			
Expo Meth Resu Com proth Spec Resu proq Spec Meth Resu Prop Resu	sure time od lit ponents: nioconazole (ISO): ies lit uinazid (ISO): ies od lit anoic acid, 2-hydrox	 72 h OECD Test G No skin irritat Rabbit No skin irritat Rabbit OECD Test G No skin irritat y-, 2-ethylhexyl estor Skin irritation 	ion ion Guideline 404 ion			



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Serio	Serious eye damage/eye irritation					
Produ Specie Expos Metho	es sure time	: Rabbit : 72 h : OECD Test Guideline 405				
<u>Comp</u>	oonents:					
proth	ioconazole (ISO):					
Specie Metho Resul	bd	 Rabbit US EPA Test Guideline OPPTS 870.2400 No eye irritation 				
proqu	uinazid (ISO):					
Specie Metho Result	bd	 Rabbit OECD Test Guideline 405 No eye irritation 				
Propa	anoic acid, 2-hydrox	y-, 2-ethylhexyl ester, (2S)-:				
Resul	t	: Eye irritation				
N,N-D)imethyldecan-1-ami	de:				
Resul	t	: Eye irritation				
Respi	iratory or skin sensi	tisation				
Produ	•					
Test T Specie Metho	Гуре es	 Local lymph node assay (LLNA) Mouse OECD Test Guideline 429 				
Comr	oonents:					
	ioconazole (ISO):					
Specie	es ssment od	 Guinea pig Does not cause skin sensitisation. US EPA Test Guideline OPPTS 870.2600 Did not cause allergic skin reactions when tested in guinea pigs. 				
Rema	ırks	: For respiratory sensitization: No relevant data found.				
proqu	uinazid (ISO):					
Test T Specie Metho Result	Гуре es od	 Maximisation Test Guinea pig OECD Test Guideline 406 Did not cause sensitisation on laboratory animals. 				

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Propa	anoic acid. 2-hvdrox	y-, 2-ethylhexyl este	r. (2S)-:
-	ssment	: The product is	a skin sensitiser, sub-category 1B. ated the potential for contact allergy in mice.
Rema	arks	: For respiratory No relevant da	
Polye	ethylene glycol mon	o(tristyrylphenyl)ethe	er:
Speci Asses Rema	ssment	: Guinea pig : Does not caus : For similar ma	e skin sensitisation. terial(s):
N,N-C	Dimethyldecan-1-am	ide:	
	ssment	: Does not caus : For similar ma	e skin sensitisation. terial(s): allergic skin reactions when tested in guinea
Rema	arks	: For respiratory No relevant da	
Germ	cell mutagenicity		
<u>Com</u>	oonents:		
-	ioconazole (ISO):	. In vitro popotio	
sessn	cell mutagenicity- As nent		toxicity studies were negative., Animal genet were negative.
proqu	uinazid (ISO):		
Germ sessn		- : In vitro genetic not show muta	toxicity studies were negative., In vivo tests o genic effects
Propa	anoic acid, 2-hydrox	y-, 2-ethylhexyl ester	r, (2S)-:
Germ sessn		- : In vitro genetic	toxicity studies were negative.
-		o(tristyrylphenyl)ethe	
Germ sessn	cell mutagenicity- As nent		component(s):, In vitro genetic toxicity studies , Animal genetic toxicity studies were negativ
N,N-C	Dimethyldecan-1-am	ide:	
Germ	cell mutagenicity- As	- : In vitro genetic	toxicity studies were negative.



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the parent animals. Has caused birth defects in laboratory animals only at dose toxic to the mother., Has been toxic to the fetus in laborator animals at doses toxic to the mother. proquinazid (ISO): Reproductive toxicity - Assessment In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S)-: Reproductive toxicity - Assessment Did not cause birth defects or any other fetal effects in laboratory animals. Polyethylene glycol mono(tristyrylphenyl)ether: For the major component(s):, In animal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects in laboratory animals. N,N-Dimethyldecan-1-amide: Non-Dimethyldecan-1-amide:	sion	Revision Date: 09.03.2023		OS Number: 0080006459	Date of last issue: - Date of first issue: 09.03.2023
prothioconazole (ISO): Carcinogenicity - Assessment proquinazid (ISO): Carcinogenicity - Assessment Polyethylene glycol mono(tristyrylphenyl)ether: Carcinogenicity - Assessment Proproductive toxicity Components: prothioconazole (ISO): Reproductive toxicity - Assessment Reproductive toxicity - Assessment In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has caused birth defects in laboratory animals only at dose toxic to the mother., Has been toxic to the fetus in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S): Reproductive toxicity - Assessment In animal studies, did not interfere with reproduction. Did not cause birth defects or any other fetal effects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S): Reproductive toxicity - Assessment Sessment Did not cause birth defects or any other fetal effects or any other fetal	Carcir	nogenicity			
Carcinogenicity - Assessment Did not cause cancer in laboratory animals. proquinazid (ISO): Earcinogenicity - Assessment Polyethylene glycol mono(tristyrylphenyl)ether: Carcinogenicity - Assessment Carcinogenicity - Assessment For the major component(s):, Polyethylene glycols did not cause cancer in laboratory animals. Reproductive toxicity Components: Prothioconazole (ISO): Reproductive toxicity - Assessment Reproductive toxicity - Assessment In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has caused birth defects in laboratory animals only at dose toxic to the mother. Has caused birth defects in laboratory animals. Proquinazid (ISO): Reproductive toxicity - Assessment In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals. Has caused birth defects or any other fetal effects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S): Exproductive toxicity - Assessment E for the major component(s):, In animal studies, did not interfere with reproduction. Polyethylene glycol mono(tristyrylphenyl)ether: E for the major component(s):, Did not cause birth defects or any other fetal effects or an	<u>Comp</u>	onents:			
Carcinogenicity - Assessment : Has caused cancer in laboratory animals. Polyethylene glycol mono(tristyrylphenyl)ether: : For the major component(s):, Polyethylene glycols did not cause cancer in long-term animal studies. Reproductive toxicity : For the major component(s):, Polyethylene glycols did not cause cancer in long-term animal studies. Reproductive toxicity : In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has caused birth defects in laboratory animals only at doses toxic to the mother., Has been toxic to the fetus in laborator animals at doses toxic to the mother. proquinazid (ISO): Reproductive toxicity - Assessment Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S): Reproductive toxicity - Assessment : Did not cause birth defects or any other fetal effects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S): Reproductive toxicity - Assessment : Did not cause birth defects or any other fetal effects in laboratory animals. Polyethylene glycol mono(tristyrylphenyl)ether: : For the major component(s):, In animal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects or any other feta	Carcin		:	Did not cause c	ancer in laboratory animals.
Carcinogenicity - Assessment : For the major component(s):, Polyethylene glycols did not cause cancer in long-term animal studies. Reproductive toxicity Components: prothioconazole (ISO): Reproductive toxicity - Assessment Reproductive toxicity - Assessment : In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has caused birth defects in laboratory animals only at dose toxic to the mother. Has been toxic to the fetus in laborator animals at doses toxic to the mother. proquinazid (ISO): Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S)-: Reproductive toxicity - Assessment : Did not cause birth defects or any other fetal effects in laboratory animals. Polyethylene glycol mono(tristyrylphenyl)ether: : For the major component(s):, In animal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects or any other fetal effe	Carcin		:	Has caused car	ncer in laboratory animals.
Carcinogenicity - Assessment : For the major component(s):, Polyethylene glycols did not cause cancer in long-term animal studies. Reproductive toxicity Components: prothioconazole (ISO): Reproductive toxicity - Assessment Reproductive toxicity - Assessment : In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has caused birth defects in laboratory animals only at dose toxic to the mother. Has been toxic to the fetus in laborator animals at doses toxic to the mother. proquinazid (ISO): Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S)-: Reproductive toxicity - Assessment : Did not cause birth defects or any other fetal effects in laboratory animals. Polyethylene glycol mono(tristyrylphenyl)ether: : For the major component(s):, In animal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects or any other fetal effe		thylene glycol mono	(trist	yrylphenyl)ether	:
Components: prothioconazole (ISO): Reproductive toxicity - Assessment Sessment In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has caused birth defects in laboratory animals only at dose toxic to the mother., Has been toxic to the fetus in laborator animals at doses toxic to the mother. proquinazid (ISO): Reproductive toxicity - Assessment Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S): Reproductive toxicity - Assessment Sessment Polyethylene glycol mono(tristyrylphenyl)ether: Reproductive toxicity - Assessment For the major component(s):, In animal studies, did not interfere with reproduction. Did not cause birth defects or any other fetal effects in laboratory animals. Polyethylene glycol mono(tristyrylphenyl)ether: Reproductive toxicity - Assessment : For the major component(s):, In animal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects or any other fetal effects or any other fetal effects or any other fetal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects or any other fetal effects in laboratory animals. N.N-Dimethyldecan-1-amide: For similar material(s):, Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth de	Carcin		-	For the major co	omponent(s):, Polyethylene glycols did not
prothioconazole (ISO): Reproductive toxicity - Assessment : In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has caused birth defects in laboratory animals only at dose toxic to the mother., Has been toxic to the fetus in laborator animals at doses toxic to the mother. proquinazid (ISO): Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S): : Did not cause birth defects or any other fetal effects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S): : Did not cause birth defects or any other fetal effects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S): : Did not cause birth defects or any other fetal effects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S): : Did not cause birth defects or any other fetal effects in laboratory animals. Propanoic acid, 2-hydroxy-, 3-ethylhexyl ester, (2S): : Did not cause birth defects or any other fetal effects in laboratory animals. Polyethylene glycol mono(tristyrylphenyl)ether: : For the major component(s):, In animal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects in laboratory animals. N,N-Dimethyldecan-1-amide: : For similar material(s):, Has been toxic to the fetus in laboratory animals. D	Repro	ductive toxicity			
Reproductive toxicity - Assessment : In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has caused birth defects in laboratory animals only at dose toxic to the mother., Has been toxic to the fetus in laborator animals at doses toxic to the mother. proquinazid (ISO): Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S)-: Reproductive toxicity - Assessment : Did not cause birth defects or any other fetal effects in laboratory animals. Polyethylene glycol mono(tristyrylphenyl)ether: : For the major component(s):, In animal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects in laboratory animals. N,N-Dimethyldecan-1-amide: : For similar material(s):, Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals. : Did not cause birth defects in laboratory animals.	<u>Comp</u>	onents:			
sessment been seen only at doses that produced significant toxicity to the parent animals. Has caused birth defects in laboratory animals only at doses toxic to the mother., Has been toxic to the fetus in laboratori animals at doses toxic to the mother. proquinazid (ISO): Reproductive toxicity - As- sessment In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S)-: Reproductive toxicity - As- sessment Did not cause birth defects or any other fetal effects in labor tory animals. Polyethylene glycol mono(tristyrylphenyl)ether: Reproductive toxicity - As- sessment For the major component(s):, In animal studies, did not inter fere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects or 	prothi	oconazole (ISO):			
Reproductive toxicity - As- sessment In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S)-: Reproductive toxicity - As- sessment Did not cause birth defects or any other fetal effects in laboratory animals. Polyethylene glycol mono(tristyrylphenyl)ether: Reproductive toxicity - As- sessment For the major component(s):, In animal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects in laboratory animals. N,N-Dimethyldecan-1-amide: Reproductive toxicity - As- sessment For similar material(s):, Has been toxic to the fetus in laboratory animals. N,N-Dimethyldecan-1-amide: Reproductive toxicity - As- sessment For similar material(s):, Has been toxic to the fetus in laboratory animals. Did not cause birth defects in laboratory animals. Did not cause birth defects in laboratory animals.		•	:	been seen only the parent anim Has caused birt toxic to the mot	at doses that produced significant toxicity to als. h defects in laboratory animals only at dose ner., Has been toxic to the fetus in laborator
sessment Did not cause birth defects in laboratory animals. Propanoic acid, 2-hydroxy-, 2-ethylhexyl ester, (2S)-: Example in the image: Complexity of	proqu	inazid (ISO):			
Reproductive toxicity - Assessment Did not cause birth defects or any other fetal effects in labor tory animals. Polyethylene glycol mono(tristyrylphenyl)ether: For the major component(s):, In animal studies, did not interfere with reproduction. Reproductive toxicity - Assessment For the major component(s):, Did not cause birth defects or any other fetal effects in laboratory animals. N,N-Dimethyldecan-1-amide: For similar material(s):, Has been toxic to the fetus in laboratory animals. N,N-Dimethyldecan-1.amide: For similar material(s):, Has been toxic to the fetus in laboratory animals. Did not cause birth defects in laboratory animals. Did not cause birth defects in laboratory animals.	-	-	:		
sessment tory animals. Polyethylene glycol mono(tristyrylphenyl)ether: Reproductive toxicity - Assessment : For the major component(s):, In animal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects on any other fetal effects in laboratory animals. N,N-Dimethyldecan-1-amide: Reproductive toxicity - Assessment : For similar material(s):, Has been toxic to the fetus in laboratory animals. Did not cause birth defects in laboratory animals.	Propa	noic acid, 2-hydroxy	·-, 2-e	thylhexyl ester,	(2S)-:
Reproductive toxicity - Assessment : For the major component(s):, In animal studies, did not interfere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects in laboratory animals. N,N-Dimethyldecan-1-amide: : For similar material(s):, Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals. : Did not cause birth defects in laboratory animals.	•		:		irth defects or any other fetal effects in labo
sessment fere with reproduction. For the major component(s):, Did not cause birth defects or any other fetal effects in laboratory animals. N,N-Dimethyldecan-1-amide: Reproductive toxicity - Assessment For similar material(s):, Has been toxic to the fetus in laboratory animals. Did not cause birth defects in laboratory animals.	Polyet	thylene glycol mono	(trist	yrylphenyl)ether	:
Reproductive toxicity - Assessment : For similar material(s):, Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.	Repro	ductive toxicity - As-	:	For the major co fere with reprod For the major co	omponent(s):, In animal studies, did not inte uction. omponent(s):, Did not cause birth defects or
sessmentry animals at doses toxic to the mother.Did not cause birth defects in laboratory animals.	N,N-D	imethyldecan-1-amic	de:		
	•	•	:		
				Did not cause b	irth defects in laboratory animals.
	etot	- single experime			

Product:



ersion D	Revision Date: 09.03.2023		0S Number: 0080006459	Date of last issue: - Date of first issue: 09.03.2023
Asse	Assessment		Evaluation of av an STOT-SE to	vailable data suggests that this material is not xicant.
<u>Com</u>	ponents:			
proth	nioconazole (ISO):			
Asse	ssment	:	Evaluation of av an STOT-SE to	vailable data suggests that this material is not xicant.
proq	uinazid (ISO):			
	ssment	:	Evaluation of av an STOT-SE to	vailable data suggests that this material is not xicant.
Prop	anoic acid, 2-hydroxy	/-, 2-е	thylhexyl ester,	(2S)-:
Asse	ssment	:	Evaluation of av an STOT-SE to	vailable data suggests that this material is not xicant.
Polye	ethylene glycol mono	(trist	yrylphenyl)ethe	
Asse	ssment	:	Evaluation of av an STOT-SE to	vailable data suggests that this material is not xicant.
N,N-I	Dimethyldecan-1-ami	de:		
Asse	ssment	:	May cause resp	iratory irritation.
STO	Г - repeated exposure	•		
Prod	uct:			
Asse				
	ssment	:	Evaluation of av an STOT-RE to	
Repe	ssment eated dose toxicity	:		
-		:		
Com	ated dose toxicity	:		
<u>Com</u> proth Appli	eated dose toxicity ponents: nioconazole (ISO): cation Route	:	an STOT-RE to	xicant.
<u>Com</u> proth	eated dose toxicity ponents: nioconazole (ISO): cation Route od	:	an STOT-RE to Ingestion OPPTS 870.410	
<u>Com</u> proth Appli Meth Rema	eated dose toxicity ponents: nioconazole (ISO): cation Route od	:	an STOT-RE to Ingestion OPPTS 870.410 In animals, effe gans: Kidney. Liver. Thyroid.	xicant.
Com proth Appli Meth Rema	eated dose toxicity ponents: nioconazole (ISO): cation Route od arks	:	an STOT-RE to Ingestion OPPTS 870.410 In animals, effe gans: Kidney. Liver. Thyroid.	xicant.

according to Regulation (EC) No. 1907/2006



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rsion)	Revision Date: 09.03.2023	SDS Number: 800080006459	Date of last issue: - Date of first issue: 09.03.2023
		Liver effects Kidney effects Thyroid effects Abnormal seru Organ weight o altered hemato	m enzyme levels changes
Propa	anoic acid, 2-hydrox	y-, 2-ethylhexyl ester	·, (2S)-:
Rema	rks	: In animals, effe after exposure Respiratory tra Lung.	
Polye	thylene glycol mon	o(tristyrylphenyl)ethe	er:
Remarks : Additives are encapsulated in the product and are n pected to be released under normal processing con foreseeable emergency.			
N,N-D	imethyldecan-1-am	ide:	
Rema	rks	gans: Eye. Liver. Symptoms of e	terial(s): ects have been reported on the following or- excessive exposure may be anesthetic or nar- izziness and drowsiness may be observed.
Aspir	ation toxicity		
<u>Produ</u> May b		ed and enters airways.	
<u>Comp</u>	oonents:		
-	ioconazole (ISO): I on physical properti	es, not likely to be an a	aspiration hazard.
	linazid (ISO): I on physical properti	es, not likely to be an a	aspiration hazard.
Propa	anoic acid, 2-hydrox	w- 2-othylboxyl ostor	. (26) .

Polyethylene glycol mono(tristyrylphenyl)ether:

Based on physical properties, not likely to be an aspiration hazard.



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N,N-Dimethyldecan-1-amide:

Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Product:		
Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 11 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 6,8 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	ErC50 (Navicula pelliculosa (Freshwater diatom)): 0,77 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to soil dwelling or- ganisms	:	NOEC: 171,5 mg/kg 171.5 mg/kg dry weight (d.w.) Exposure time: 56 d Species: Eisenia andrei (red worm) Method: OECD Test Guideline 222
Toxicity to terrestrial organ- isms	:	LD50: > 824 Exposure time: 48 h End point: Acute oral toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 213
		LD50: 789 Exposure time: 48 h End point: Acute contact toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 214



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	Comp	onents:			
	prothi	oconazole (ISO):			
	Toxicity to fish		:		I is very toxic to aquatic organisms below 1 mg/L in the most sensitive spe-
				LC50 (Rainbow tre Exposure time: 96	out (Oncorhynchus mykiss)): 1,83 mg/l 5 h
		y to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48	agna (Water flea)): 1,3 mg/l s h
	Toxicit <u>y</u> plants	y to algae/aquatic	:	ErC50 (Pseudokir mg/l End point: Growth Exposure time: 72	
				ErC50 (Skeletone Exposure time: 72	ma costatum (marine diatom)): 0,046 mg/l ? h
	M-Fact icity)	or (Acute aquatic tox-	:	10	
	Toxicity	y to fish (Chronic tox-	:	NOEC: 0,308 mg/ Exposure time: 97 Species: Oncorhy	
		y to daphnia and other invertebrates (Chron- ity)	:	NOEC: 0,56 mg/l Exposure time: 21 Species: Daphnia	d magna (Water flea)
	M-Fact toxicity	or (Chronic aquatic)	:	1	
	proqui	nazid (ISO):			
	Toxicit	y to fish	:	LC50 (Oncorhync Exposure time: 96 Method: OECD Te GLP: yes	
				LC50 (Lepomis m Exposure time: 96 Method: OECD Te GLP: yes	
		y to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48 Test Type: flow-th Method: OECD Te GLP: yes	rough test
				EC50 (Americamy	/sis bahia (mysid shrimp)): 0,11 mg/l

according to Regulation (EC) No. 1907/2006

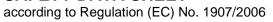


Versi 1.0	ion	Revision Date: 09.03.2023		9S Number: 0080006459	Date of last issue: - Date of first issue: 09.03.2023
				Exposure time: 96 Test Type: flow-th Method: US EPA GLP: yes	
	Toxicity plants	y to algae/aquatic		ErC50 (Pseudokir 0,740 mg/l Exposure time: 72 Method: OECD Te GLP: yes	
				End point: Frond Exposure time: 14	ba (duckweed)): > 0,2 mg/l d Test Guideline OPP 122-2 & 123-2
	M-Facto icity)	or (Acute aquatic tox-	:	1	
	Toxicity icity)	to fish (Chronic tox-	:	NOEC: 0,0030 mg Exposure time: 90 Species: Oncorhy Test Type: Early L Method: OECD Te GLP: yes) d nchus mykiss (rainbow trout) .ife-Stage
ä	Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)		: NOEC: 0,0018 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202 GLP: yes		d magna (Water flea)
	M-Facto toxicity)	or (Chronic aquatic	:	10	
-		to soil dwelling or-	:	LC50: > 1.000 mg Exposure time: 14 Species: Eisenia f Method: OECD Te GLP:yes	etida (earthworms)
-	Toxicity isms	to terrestrial organ-	:	•	/kg /irginianus (Bobwhite quail) Test Guideline OPP 71-1
				LC50: > 5.620 mg Exposure time: 5 o Species: Colinus v Method: OECD Te GLP:yes	d virginianus (Bobwhite quail)
				LC50: > 5.620 mg Exposure time: 5 o Species: Anas pla	

according to Regulation (EC) No. 1907/2006



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			Method: OECD To GLP:yes	est Guideline 205
			oral LD50: > 0,12 Exposure time: 72 Species: Apis me Method: OEPP/El GLP:yes	2 h
			contact LD50: > 0 Exposure time: 72 Species: Apis me Method: OEPP/El GLP:yes	2 h
-	anoic acid, 2-hydroxy-, ity to fish	2-e	Remarks: Materia	2 S)-: Il is harmful to aquatic organisms I between 10 and 100 mg/L in the most sen-
			LC50 (Pimephale Exposure time: 96	s promelas (fathead minnow)): 32 mg/l 5 h
	ity to daphnia and other tic invertebrates	:	EC50 (Daphnia m Exposure time: 48	nagna (Water flea)): 83 mg/l 3 h
Polye	ethylene glycol mono(t	rist	yrylphenyl)ether:	
	oxicology Assessment e aquatic toxicity		Harmful to aquation	c life.
Chroi	nic aquatic toxicity	:	Harmful to aquation	c life with long lasting effects.
	Dimethyldecan-1-amide ity to fish	:	LC50 (Danio reric Exposure time: 96	o (zebra fish)): 14,8 mg/l 5 h
	ity to daphnia and other tic invertebrates	:	LC50 (Daphnia m Exposure time: 48	agna (Water flea)): 7,7 mg/l 3 h
Toxic plants	ity to algae/aquatic s	:	ErC50 (Pseudokir mg/l Exposure time: 72	rchneriella subcapitata (green algae)): 16,06 2 h
	ity to daphnia and other tic invertebrates (Chron- icity)	:	NOEC: 0,079 mg/ Exposure time: 2 ⁴ Species: Daphnia	
	oxicology Assessment e aquatic toxicity	:	Toxic to aquatic li	fe.





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12.2 Pers	istence and degrada	bility	
Prod			
Biode	egradability		adily biodegradable. I on data obtained on active ingredient.
<u>Com</u>	ponents:		
proth	nioconazole (ISO):		
Biode	egradability		ly biodegradable. al is expected to biodegrade very slowly (in . Fails to pass OECD/EEC tests for ready
proq	uinazid (ISO):		
Biode	egradability	: Result: Not readi Biodegradation: Exposure time: 2 Remarks: Materia OECD/EEC guide	1 % 8 d al is not readily biodegradable according to
Stabi	lity in water	: Test Type: Photo Degradation half	olysis life (DT50): 0,03 d
Prop	anoic acid, 2-hydrox	/-, 2-ethylhexyl ester, (2S)-:
-	egradability	: Remarks: For sin	nilar material(s): y biodegradable. Passes OECD test(s) for
		Result: Readily b Biodegradation:	86 %
		Exposure time: 2 Method: OECD T Remarks: For sin 10-day Window:	Fest Guideline 301C or Equivalent nilar material(s):
N,N-I	Dimethyldecan-1-am	de:	
	egradability		al is readily biodegradable. Passes OECD biodegradability.
		Result: Readily b Biodegradation: Exposure time: 1 Method: OECD T Remarks: 10-day	66,12 % 1 d Fest Guideline 301B or Equivalent
12.3 Bioa	ccumulative potentia	I	
Prod	uct:		

Bioaccumulation : Remarks: Does not bioaccumulate. Estimation based on data obtained on active ingredient.



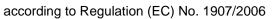
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Com	ponents:			
prot	nioconazole (ISO):			
-	ccumulation	:		nis macrochirus (Bluegill sunfish) on factor (BCF): 19,7
	Partition coefficient: n- octanol/water		log Pow: 3,82 (20 °C) pH: 7 Remarks: Bioconcentration potential is low (BCF < 100 or Lo Pow < 3).	
prog	uinazid (ISO):			
Bioa	ccumulation	:	Bioconcentration Method: OECD GLP: yes	nis macrochirus (Bluegill sunfish) on factor (BCF): 821 9 Test Guideline 305 substance has a high potential of bioaccumula-
	tion coefficient: n- nol/water	:	Remarks: No re	elevant data found.
Prop	anoic acid, 2-hydroxy	-, 2-e	ethylhexyl ester	, (2S)-:
	tion coefficient: n- nol/water	:		oncentration potential is moderate (BCF be- 3000 or Log Pow between 3 and 5).
Poly	ethylene glycol mono(trist	vrvlnhenvl)ethe	r
Parti	tion coefficient: n- nol/water	•		elevant data found.
N,N-	Dimethyldecan-1-amid	le:		
	tion coefficient: n- nol/water	:		ated. oncentration potential is moderate (BCF be- 3000 or Log Pow between 3 and 5).
12.4 Mob	ility in soil			
	l <mark>uct:</mark> ibution among environ- al compartments	:	Remarks: The	product is not expected to be mobile in soils.
<u>Com</u>	ponents:			
Distri	nioconazole (ISO): ibution among environ- al compartments	:	Koc: 1765 Remarks: Pote and 2000).	ntial for mobility in soil is low (Koc between 500
prog	uinazid (ISO):			

proquinazid (ISO):



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	bution among environ- al compartments	: Koc: 821 Remarks: Th	e product is not expected to be mobile in soils.
Prop	anoic acid, 2-hydroxy-	, 2-ethylhexyl est	er, (2S)-:
	bution among environ- al compartments	: Koc: 330 Remarks: Po 150 and 500	tential for mobility in soil is medium (Koc between).
N,N-I	Dimethyldecan-1-amid	e:	
Distri	bution among environ- al compartments	: Koc: 351 - 63	tential for mobility in soil is medium (Koc between
12.5 Resu	ilts of PBT and vPvB a	ssessment	
<u>Prod</u>	uct:		
Asse	ssment	to be either p	ce/mixture contains no components considered persistent, bioaccumulative and toxic (PBT), or nt and very bioaccumulative (vPvB) at levels of er.
Com	ponents:		
proth	nioconazole (ISO):		
Asse	ssment	lating and to	ce is not considered to be persistent, bioaccumu- kic (PBT) This substance is not considered to be nt and very bioaccumulating (vPvB).
prog	uinazid (ISO):		
	ssment		ce has not been assessed for persistence, bioac- nd toxicity (PBT).
Prop	anoic acid, 2-hydroxy-	, 2-ethylhexyl est	er, (2S)-:
Asse	ssment	lating and to:	ce is not considered to be persistent, bioaccumu- kic (PBT) This substance is not considered to be nt and very bioaccumulating (vPvB).
N,N-I	Dimethyldecan-1-amid	e:	
Asse	ssment	lating and to	ce is not considered to be persistent, bioaccumu- kic (PBT) This substance is not considered to be nt and very bioaccumulating (vPvB).
12.6 Endo	ocrine disrupting prop	erties	
Prod	uct:		
Asse	ssment	ered to have REACH Artic	ce/mixture does not contain components consid- endocrine disrupting properties according to ele 57(f) or Commission Delegated regulation 100 or Commission Regulation (EU) 2018/605 at





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		levels of 0.19	% or higher.
12.7 Othe	er adverse effects		
Com	ponents:		
protl	hioconazole (ISO):		
Ozor	ne-Depletion Potential		is substance is not on the Montreal Protocol list s that deplete the ozone layer.
proq	uinazid (ISO):		
Ozor	ne-Depletion Potential		is substance is not on the Montreal Protocol list s that deplete the ozone layer.
Prop	anoic acid, 2-hydroxy	-, 2-ethylhexyl est	er, (2S)-:
Ozor	ne-Depletion Potential		is substance is not on the Montreal Protocol list s that deplete the ozone layer.
N,N-	Dimethyldecan-1-amid	le:	
Ozor	ne-Depletion Potential		is substance is not on the Montreal Protocol list s that deplete the ozone layer.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	 If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14: Transport information

14.1 UN number or ID number

ADR	:	UN 3082
RID	:	UN 3082
IMDG	:	UN 3082
ΙΑΤΑ	:	UN 3082



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14.2	UN pro	oper shipping name			
	ADR		:	ENVIRONMENTA N.O.S. (Prothioconazole,	ALLY HAZARDOUS SUBSTANCE, LIQUID, Proquinazid)
	RID		:	ENVIRONMENTA N.O.S. (Prothioconazole,	ALLY HAZARDOUS SUBSTANCE, LIQUID, Proquinazid)
	IMDG		:	ENVIRONMENTA N.O.S. (Prothioconazole,	ALLY HAZARDOUS SUBSTANCE, LIQUID, Proquinazid)
	ΙΑΤΑ		:	Environmentally h (Prothioconazole,	nazardous substance, liquid, n.o.s. Proquinazid)
14.3	Trans	oort hazard class(es)			
	ADR		:	9	
	RID		:	9	
	IMDG		:	9	
	ΙΑΤΑ		:	9	
14.4	Packir	ng group			
	Classif Hazarc Labels	g group ication Code I Identification Number restriction code	:	III M6 90 9 (-)	
	Classif Hazaro Labels	g group ication Code I Identification Number	:	III M6 90 9	
	IMDG Packin Labels EmS C Remar		:	III 9 F-A, S-F Stowage category	/ A
:	Packin aircraft		:	964	
		g instruction (LQ) g group	:	Y964 III Miscellaneous	
1	Packin ger airo Packin	Passenger) g instruction (passen- craft) g instruction (LQ) g group	:	964 Y964 III Miscellaneous	



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14.5 Environmental hazards

ADR Environmentally hazardous	:	no
RID Environmentally hazardous	:	no
IMDG Marine pollutant	:	yes

14.6 Special precautions for user

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA Special provision A197, and ADR/RID special provision 375.

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.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

-	
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Not applicable
Regulation (EC) No 1005/2009 on substances that de- plete the ozone layer	: Not applicable
Regulation (EU) 2019/1021 on persistent organic pollu- tants (recast)	: Not applicable
Regulation (EC) No 649/2012 of the European Parlia- ment and the Council concerning the export and import of dangerous chemicals	: Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	: Not applicable
Seveso III: Directive 2012/18/EU of the Euro- pean Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	ENVIRONMENTAL HAZARDS

Registration Number : AS2-8F(2022)

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.



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The mixture is evaluated within the frame of the provisions of Regulation (EC) No. 1107/2009. Refer to the label for exposure assessment information.

SECTION 16: Other information

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

Full text of H-Statements

H315 :	Causes skin irritation.
H317 :	May cause an allergic skin reaction.
H319 :	Causes serious eye irritation.
H335 :	May cause respiratory irritation.
H351 :	Suspected of causing cancer.
H400 :	Very toxic to aquatic life.
H410 :	Very toxic to aquatic life with long lasting effects.
H411 :	Toxic to aquatic life with long lasting effects.
H412 :	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

	Short-term (acute) aquatic hazard Long-term (chronic) aquatic hazard
•	Carcinogenicity
Eye Irrit. :	Eye irritation
Skin Irrit.	Skin irritation
Skin Sens. :	Skin sensitisation
STOT SE :	Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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 sub-

according to Regulation (EC) No. 1907/2006

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stance; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information				
	Other information Classification of the mixture		e of the directions of use on the label. Classification procedure:	
	Eye Irrit. 2	H319	Calculation method	
	Skin Sens. 1	H317	Calculation method	
	Carc. 2	H351	Calculation method	
	Aquatic Acute 1	H400	Based on product data or assessment	
	Aquatic Chronic 1	H410	Calculation method	

Product code: GF-3881

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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