



Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.05.2022	800080005258	Date of first issue: 12.05.2022

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 Georgia and may not meet the regulatory requirements in other countries.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name	•	QUELEX [™] 200WG Herbicide
1 Toddot Hame		

Manufacturer or supplier's details

COMPANY IDENTIFICATION Manufacturer/importer :	:	Corteva Agriscience International S.a.r.l. Route de Suisse 160 CH-1290 Versoix Switzerland
E-mail address	:	SDS@corteva.com
Emergency telephone num- ber	:	+32 3 575 55 55

Recommended use of the chemical and restrictions on use

Recommended use	: End use	e herbicide product
		, 1101 biolao pi baao

2. HAZARDS IDENTIFICATION

GHS Classification Eye irritation	:	Category 2B			
Short-term (acute) aquatic hazard	:	Category 1			
Long-term (chronic) aquatic hazard	:	Category 1			
GHS-Labelling Hazard pictograms	:				
Signal word	:	Warning			
Hazard statements	:	H320 Causes eye irritation. H410 Very toxic to aquatic life with long lasting effects.			
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Preca	utionary statements	P273 Avoid rel	in thoroughly after handling. ease to the environment. e protection/ face protection.			
		Response: P305 + P351 + P338 IF IN EYES: Rinse cautiously with for several minutes. Remove contact lenses, if present a easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advic tention. P391 Collect spillage.				
		Disposal: P501 Dispose disposal plant.	of contents/ container to an approved waste			

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Components

Chemical name	CAS-No.	Classification	MAC value mg/m3 / TSEL value	Concentration (% w/w)
Halauxifen-methyl	943831-98-9	Aquatic Acute1; H400 Aquatic Chronic1; H410	No data available	10,45
florasulam (ISO)	145701-23-1	Aquatic Acute1; H400 Aquatic Chronic1; H410	No data available	9,79
Cloquintocet	88349-88-6	Aquatic Acute3; H402 Aquatic Chronic2; H411	No data available	7,06
Kaolin	1332-58-7		MPC-TWA: 8 mg/m3 aerosols of pre- dominantly fibro- genic action, Class 3 - Moder- ately dangerous Data Source: RU OEL	>= 10 - < 20

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rsion Revision Date: 12.05.2022		SDS Number 8000800052		Date of last issue: - Date of first issue: 12.05.2022			
Sodiun	n lignosulfonate	8061-51-6	Eye Irrit.2A; H319	MPC-STEL: 2 >: mg/m3 Class 3 - Moder- ately dangerous Data Source: RU OEL	= 10 - < 2		
citric a	cid	77-92-9	Eye Irrit.2A; H319	MPC-STEL: 1 >= mg/m3 Class 3 - Moder- ately dangerous Data Source: RU OEL	= 10 - < 2		
Urea, p hyde	oolymer with formalde-	9011-05-6	Acute Tox.5 H303 Acute Tox.5 H313	, 	= 10 - < 2		
Sodiun oleoylt	n N-methyl-N- aurine	137-20-2	Acute Tox.5 H303 Acute Tox.5 H313 Eye Irrit.2A; H319 Aquatic Acute2; H40	· · · · · · · · · · · · · · · · · · ·	= 1 - < 2,		
Disodiu	um maleate	371-47-1	Acute Tox.5 H303 Skin Irrit.2; H315 Eye Irrit.2A; H319 Skin Sens.1 H317 STOT SE3; H335 (Respiratory system)	· ,	= 0,3 - < 1		
Quartz		14808-60-7	Carc.1A; H350	MPC-TWA: 1 > mg/m3 aerosols of pre- dominantly fibro- genic action, Class 3 - Moder- ately dangerous Data Source: RU OEL	= 0,3 - < 1		
				MPC-STEL: 3 mg/m3 aerosols of pre- dominantly fibro- genic action, Class 3 - Moder- ately dangerous			



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					Data Source: RU OEL		
For ex	planation of abbreviation	ons se	e section 16.				
. FIRST A							
lf inha	led	e r r	emergency resp ation; if by mou	onder or a th to mout	If person is not brea ambulance, then giv h use rescuer prote ontrol center or doc	e artificial respi ction (pocket	
In cas	e of skin contact	T : F C	ake off contam plenty of water f or doctor for trea	or 15-20 n atment adv	thing. Rinse skin im ninutes. Call a poisc vice. y shower facility sho	on control cente	
In cas	e of eye contact	: H 2 r c	fold eyes open 20 minutes. Ren ninutes, then co center or doctor	nove conta ontinue rina for treatm	slowly and gently w act lenses, if presen sing eyes. Call a po ent advice. vash facility should b	t, after the first ison control	
	llowed	: No emergency medical treatment necessary.					
	mportant symptoms ffects, both acute and ed	: N	lone known.				
	ction of first-aiders	a s I	and use the reco sistant gloves, s	ommendeo plash prot oposure ex	kists refer to Section	(chemical re-	
Notes	to physician	: N T s H t	No specific antic Treatment of ex symptoms and t Have the Safety	lote. Dosure she he clinical Data She ith you wh	ould be directed at t condition of the pat et, and if available, en calling a poison	ient. the product cor	

5. FIREFIGHTING MEASURES

Flammable properties		
Flash point	:	Method: closed cup
Ignition temperature	:	Not applicable 238 °C
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Flammability (solid, gas)	:	No data available

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Suitat	ble extinguishing media	:	Water spray Alcohol-resista	nt foam		
Unsui media	table extinguishing	:	None known.			
Specific hazards during fire- fighting		:	Exposure to combustion products may be a hazard to health. Do not allow run-off from fire fighting to enter drains or water courses.			
Hazaı ucts	dous combustion prod-	:	tion to combust be toxic and/or	oducts may include and are not limited to:		
Specific extinguishing meth- ods		:	so. Evacuate area. Use extinguishi cumstances an	naged containers from fire area if it is safe to ing measures that are appropriate to local cir- d the surrounding environment. y to cool unopened containers.		
Further information		:	Collect contam must not be dis Fire residues a	inated fire extinguishing water separately. Th charged into drains. nd contaminated fire extinguishing water mus in accordance with local regulations.		
	al protective equipment efighters	:	Wear self-conta essary.	ained breathing apparatus for firefighting if ne rotective equipment.		

Personal precautions, protec- tive equipment and emer- gency procedures	 Avoid dust formation. Avoid breathing dust. Use personal protective equipment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
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. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained. Prevent from entering into soil, ditches, sewers,undwater. See Section 12, Ecological Information.
Methods and materials for containment and cleaning up	 Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in. Pick up and arrange disposal without creating dust. Recovered material should be stored in a vented container. The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to over-



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		pressurization of the container. Keep in suitable, closed containers for disposal. Sweep up or vacuum up spillage and collect in suitable con- tainer for disposal. See Section 13, Disposal Considerations, for additional infor- mation.	
7. HANDLII	NG AND STORAGE		
Advice	on safe handling	Do not smoke Handle in acc practice. Smoking, eati plication area Do not get in Avoid contact Avoid prolong Take care to environment. Use appropria	ordance with good industrial hygiene and safety ng and drinking should be prohibited in the ap-
kept upright to prevent leakage. Keep in properly labelled containers.		hich are opened must be carefully resealed and prevent leakage.	
Materia	als to avoid	: Do not store r Strong oxidizi	near acids.
Packa	ging material	: Unsuitable ma	aterial: None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Kaolin	1332-58-7	MPC-TWA (aerosol)	8 mg/m3	RU OEL
	Further informa	ation: aerosols o	f predominantly fibro	genic action,
	Class 3 - Mode	erately dangerou	S	-
		TWA (Res-	0,1 mg/m3	2004/37/EC
		pirable dust)	_	
Sodium lignosulfonate	8061-51-6	MPC-STEL	2 mg/m3	RU OEL
		(aerosol)		
	Further information: Class 3 -		Moderately dangerous	S
citric acid	77-92-9	MPC-STEL	1 mg/m3	RU OEL
		(aerosol)	-	
	Further information: Class 3 - Moderately dangerous		S	
Quartz	14808-60-7	MPC-TWA	1 mg/m3	RU OEL
		(Aerosol -	-	
		total mass)		



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				ation: aerosols o rately dangerou	f predominantly fibr	ogenic action
				MPC-STEL (Aerosol - total mass)	3 mg/m3	RU OEL
					f predominantly fibr	ogenic action
				TWA (Res- pirable dust)	0,1 mg/m3	2004/37/E0
Engin	eering measures	:	maintain airbo guidelines. If ments or guide for most opera	rne levels below there are no app elines, general v ations.	or other engineering v exposure limit requi- plicable exposure lim ventilation should be be necessary for so	irements or nit require- sufficient
Perso	nal protective equip	ment				
Respir	atory protection	:	tial to exceed If there are no guidelines, we such as respir enced, or whe For most conc	the exposure lim applicable expo ar respiratory pr atory irritation o re indicated by litions, no respir ver, in dusty atm	be worn when there hit requirements or g osure limit requirements rotection when adver r discomfort have be your risk assessment atory protection show nospheres, use an a	uidelines. ents or rse effects, een experi- t process. uld be
Hand	protection					
	marks	:	 Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Polyvinyl chloride ("PVC" or "vinyl"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier. Use chemical goggles. 			
	otection nd body protection	:	Use protective Selection of sp	clothing chemi	cally resistant to this th as face shield, boo the task.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Granules.
Colour	:	Tan
Odour	:	Mild
Odour Threshold	:	No data available

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рН		:	4,5 (24,3 °C) Concentration: 1, 1% solution	0 %
Freezi	ng point	:	Not applicable	
Melting	g point/range		No data available	
Boiling	point/boiling range	:	Not applicable	
Flash	point	:	Method: closed c Not applicable	up
Evapo	ration rate	:	Not applicable	
Flamm	nability (solid, gas)	:	No data available	
	explosion limit / Upper ability limit	:	Not applicable	
	explosion limit / Lower ability limit	:	Not applicable	
Vapou	r pressure	:	Not applicable	
Relativ	ve vapour density	:	Not applicable	
Relativ	ve density	:	No data available	
Densit	у	:	No data available	,
Bulk d	ensity	:	0,5108 g/mL (23, Method: Loose V	
Solubi Wa	lity(ies) ter solubility	:	No data available	
Auto-ię	gnition temperature	:	238 °C	
Viscos Vis	ity cosity, dynamic	:	Not applicable	
Explos	sive properties	:	No	
Oxidiz	ing properties	:	No significant inc	rease (>5C) in temperature.
			Reference substa	ance: Monoammonium phosphate

10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: No decomposition if stored and applied as directed.
-	Stable under normal conditions.



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Poss	ibility of hazardous reac-	:		ommended storage conditions. specially mentioned.
00	Conditions to avoid Incompatible materials		None known. Strong acids Strong bases	
	Hazardous decomposition products		Decomposition pl and the presence	roducts depend upon temperature, air supply e of other materials. roducts can include and are not limited to: NOx)

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
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Product:

Acute oral toxicity	:	LD50 (Rat, female): > 5.000 mg/kg Method: OECD Test Guideline 423
		Symptoms: No deaths occurred at this concentration.
		by mptoms. No dealing occurred at this concentration.
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 5,68 mg/l
		Exposure time: 4 h
		Test atmosphere: dust/mist Method: OECD Test Guideline 403
		Symptoms: No deaths occurred at this concentration.
		Assessment: The substance or mixture has no acute inhala-
		tion toxicity
Acute dermal toxicity	:	LD50 (Rat, male and female): > 5.000 mg/kg
		Method: OECD Test Guideline 402
		Symptoms: No deaths occurred at this concentration.
Componentes		
Components:		
Halauxifen-methyl:		
•	:	LD50 (Rat, female): > 5.000 mg/kg
•	:	LD50 (Rat, female): > 5.000 mg/kg LD50 (Rat, male and female): > 5.000 mg/kg
Acute oral toxicity	:	
Acute oral toxicity	:	
Acute oral toxicity Acute dermal toxicity florasulam (ISO):	:	
Acute oral toxicity Acute dermal toxicity florasulam (ISO):	:	LD50 (Rat, male and female): > 5.000 mg/kg
Acute oral toxicity Acute dermal toxicity florasulam (ISO): Acute oral toxicity	:	LD50 (Rat, male and female): > 5.000 mg/kg LD50 (Rat): > 6.000 mg/kg LD50 (Mouse): > 5.000 mg/kg LC50 (Rat): > 5,0 mg/l
Acute oral toxicity Acute dermal toxicity florasulam (ISO): Acute oral toxicity	:	LD50 (Rat, male and female): > 5.000 mg/kg LD50 (Rat): > 6.000 mg/kg LD50 (Mouse): > 5.000 mg/kg LC50 (Rat): > 5,0 mg/l Exposure time: 4 h
Acute oral toxicity Acute dermal toxicity florasulam (ISO): Acute oral toxicity	:	LD50 (Rat, male and female): > 5.000 mg/kg LD50 (Rat): > 6.000 mg/kg LD50 (Mouse): > 5.000 mg/kg LC50 (Rat): > 5,0 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute oral toxicity Acute dermal toxicity florasulam (ISO): Acute oral toxicity	:	LD50 (Rat, male and female): > 5.000 mg/kg LD50 (Rat): > 6.000 mg/kg LD50 (Mouse): > 5.000 mg/kg LC50 (Rat): > 5,0 mg/l Exposure time: 4 h
Acute oral toxicity Acute dermal toxicity florasulam (ISO): Acute oral toxicity	:	LD50 (Rat, male and female): > 5.000 mg/kg LD50 (Rat): > 6.000 mg/kg LD50 (Mouse): > 5.000 mg/kg LC50 (Rat): > 5,0 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhala-



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		Symptoms: No deaths occurred at this Assessment: The substance or mixture toxicity	
Cloa	uintocet:		
-	e oral toxicity	: LD50 (Rat, female): > 2.000 mg/kg Symptoms: No deaths occurred at this Assessment: The substance or mixture icity	
Acute	inhalation toxicity	: LC50 (Rat, male and female): > 6,11 m Exposure time: 4 h Test atmosphere: dust/mist Symptoms: No deaths occurred at this Assessment: The substance or mixture tion toxicity	concentration.
Acute	e dermal toxicity	: LD50 (Rat, male and female): > 5.000	mg/kg
Kaoli	n:		
Acute	e oral toxicity	: LD50 (Rat): > 5.000 mg/kg	
Sodiu	um lignosulfonate:		
Acute	e oral toxicity	: LD50 (Rat, male and female): > 10.000) mg/kg
Acute	e inhalation toxicity	: LC50 (Rat): 0,48 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture tion toxicity	has no acute inhala-
citric	acid:		
Acute	e oral toxicity	: LD50 (Mouse): 5.400 mg/kg Assessment: The substance or mixture icity	has no acute oral tox-
		LD50 (Rat): 3.000 - 12.000 mg/kg	
Acute	e dermal toxicity	: LD50 (Rabbit): > 2.000 mg/kg Symptoms: No deaths occurred at this Assessment: The substance or mixture toxicity	
Urea	, polymer with forma	ehvde:	
	e oral toxicity	: LD50 (Rat): > 2.000 mg/kg Method: Estimated.	
Acute	e dermal toxicity	: LD50 (Rat): > 2.000 mg/kg Method: Estimated.	

Sodium N-methyl-N-oleoyltaurine:

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Acute oral toxicity::LD50 (Rat): > 2.000 mg/kgAcute dermal toxicity::LD50 (Rat): > 2.000 mg/kgDisodium maleate: Acute oral toxicity::LD50 (Rat): 3.380 mg/kgSkin corrosion/irritation:Product: Sepcies::Rabbit MethodMethod:::Species::No skin irritationComponents: Kaolin: Result::No skin irritationCitric acid: Result::No skin irritationDisodium maleate: Result::No skin irritationDisodium maleate: Result::::Species::Rabbit ResultResult::No skin irritationDisodium maleate: Result::::Species::Rabbit ResultResult::No skin irritationDisodium maleate: Result::::Species::Rabbit ResultResult::No skin irritationDisodium maleate: Result::::Species:::Species:::Species:::Species:::Species:::Species:<:Result:<	Version 1.0	Revision Date: 12.05.2022		DS Number: 00080005258	Date of last issue: - Date of first issue: 12.05.2022
Disodium maleate: Acute oral toxicity : LD50 (Rat): 3.380 mg/kg Skin corrosion/irritation Product: Species : Method : OECD Test Guideline 404 Result : No skin irritation Disodium maleate: : Species Species : Rabbit Result : No skin irritation Disodium maleate: : No skin irritation Disodium maleate: : : Species : Rabbit Result : No skin irritation Disodium maleate: : : Species : Rabbit Result : No skin irritation Disodium fulle to the irritation : Disodium seque damage/eye irritation : Method : : Species : Rabbit Result : : Species : : Species : : Species : :	Acute o	oral toxicity	:	LD50 (Rat): > 2.0	00 mg/kg
Acue oral toxicity x LD50 (Rat); 3.380 mg/kg Skin corrosion/irritation Podicity x Rathod x Species x Raulty x Orpponents: X Kaolin: x Species x Result x No skin irritation Citric acid: Result x Result x Species x Result x Species x Result x No skin irritation Disodium maleate: Species x Result x Species x Result x No skin irritation Quartz: x Result x Species x Method x OECD Test Guideline 405 Components: Result x Species x Result x No eye irritation	Acute d	Acute dermal toxicity		LD50 (Rat): > 2.0	00 mg/kg
Skin corrosion/irritation Product: Species Rabbit Method OCCD Test Guideline 404 Result No skin irritation Species Result Result Result Result Result No skin irritation Oritation Oritation Oritation Oritation Oritation Species Result Result Result No skin irritation Oritation Oritation Oritation Oritation Oritation Result Result Result No skin irritation Oritation Oritat	Disodi	um maleate:			
Product: Species : Method : Method : Method : Result : No skin irritation Components: Kaolin: Species Species Species Species Species Species Result Result Result Species Result Species Species Species Species Species Species Species Species Result Result Species Result Species Result Species Species Species Result Method Species Result Species Result Species Result Species <td< td=""><td>Acute o</td><td>oral toxicity</td><td>:</td><td>LD50 (Rat): 3.380</td><td>) mg/kg</td></td<>	Acute o	oral toxicity	:	LD50 (Rat): 3.380) mg/kg
Species : Rabbit Method : OECD Test Guideline 404 Result : No skin irritation Species : Rabbit Species : Rabbit Result : No skin irritation citric acid:	Skin co	prrosion/irritation			
Method : OECD Test Guideline 404 Result : No skin irritation Components: . Kaolin: . Species : Rabbit Result : No skin irritation citric acid: . . Result : No skin irritation Disodium maleate: . . Species : Rabbit Result : Skin irritation Disodium maleate: . . Species : Rabbit Result : Skin irritation Quartz: . . Result : No skin irritation Serious eye damage/eye irritation . Product: . . Species : . Result : OECD Test Guideline 405 Components: . . Species : . Species : . Species : . Species :	Produc	<u>:t:</u>			
Result : No skin irritation Components:	Species	3	:	Rabbit	
Species Rabbit Result No skin irritation cirric acid: . Result No skin irritation cirric acid: . Result No skin irritation Disodium maleate: . Species Rabbit Result Stabbit Result Stabbit Result Skin irritation Ourtz: . Result No skin irritation Species Rabbit Result No skin irritation Method Poloce Method Coloce I Stabbit Result No eye irritation Method No eye irritation Species Rabbit Result No eye irritation Method No eye irritation Method No eye irritation Specie			:		eline 404
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Species:Rabbit No skin irritationcitric acid: Result:No skin irritationDisodium maleate: Species:No skin irritationDisodium maleate: Species:No skin irritationDisodium maleate: Species:No skin irritationDisodium maleate: Species:No skin irritationCuartz: Result:No skin irritationDisodium eye damage/eye irritation:No skin irritationDisodium eye damage/eye irritation:No skin irritationDisodium: Species::Result::Method::Disodium: Species::Specie	Compo	onents:			
Result:No skin irritationcitric acid:	Kaolin:	:			
citric acid:ResultK No skin irritationDisodium maleate:SpeciesK RabbitResultSkin irritationCuartz:ResultK No skin irritationDerous eye damage/eye irritationSerious eye damage/eye irritationSpeciesK RabbitMethodK Didle ye irritationMethodY OECD Test Guideline 405Components:Kaolin:SpeciesK RabbitResultNo eye irritationSpeciesKaolin:SpeciesK RabbitResultNo eye irritationStorium lignosulfonate:ResultK Eye irritationcitric acid:		6	:		
Result : No skin irritation Disodium maleate: Species : Rabbit Result : Skin irritation Quartz: Result : No skin irritation Serious eye damage/eye irritation Product: Species : Rabbit Result : No skin irritation Method : OECD Test Guideline 405 Components: Kaolin: Species : Rabbit Result : No eye irritation Method : OECD Test Guideline 405 Components: Kaolin: Species : Rabbit Result : No eye irritation Species : Rabbit Result : DECD Test Guideline 405 Components: Kaolin: Species : Rabbit Result : No eye irritation State Kaolin: Result : No eye irritation Components: Kaolin: Species : Result : Result : Sodium lignosulfonate: : Kevit : Eye irritation	Result		:	No skin irritation	
Disodium maleate: Species : Rabbit Result : Skin irritation Duartz: Result : No skin irritation Serious eye damage/eye irritation Serious eye damage/eye irritation Species : Rabbit Result : Mild eye irritation Method : OECD Test Guideline 405 Species : Rabbit Kaolin: : Species : Rabbit Result : No eye irritation Stoiun lignosulfonate: : Result : Eye irritation citric acid: :	citric a	cid:			
Species : Rabbit Result : Skin irritation Quartz: Result : No skin irritation Serious eye damage/eye irritation Serious eye damage/eye irritation Product: Species : Result : Method : OECD Test Guideline 405 Components: Kaolin: Species : Result : Species Esult Species Mathod Species Result Species Species Result Species Result Species Species Result Suite Sodium lignosulfonate: Result Result Suite State Result Sodium lignosulfonate: Result Suite Result Result Suite Suite Suite Result Result Suite Suite Suite Suite Suite Suite Suite Suite Suite <t< td=""><td>Result</td><td></td><td>:</td><td>No skin irritation</td><td></td></t<>	Result		:	No skin irritation	
Result : Skin irritation Quartz:	Disodi	um maleate:			
Quartz:Result: No skin irritationSerious eye damage/eye irritationSpecies eye damage/eye irritationSpecies :Result: RabbitMethod: OECD Test Guideline 405Components:Species :: RabbitSpecies :: No eye irritationSpecies :: No eye irritationSpecies :: No eye irritationEsult :: No eye irritationComponents:: No eye irritationComponents:: Secies :Species :: Eye irritationSotium lignosulfonate:: Eye irritationcitric acid:: Secies :	Species	5	:	Rabbit	
Result : No skin irritation Serious eye damage/eye irritation Product: Species : Rabbit Result : Mild eye irritation Method : OECD Test Guideline 405 Components: : Species : Rabbit Result : No eye irritation citric acid: : Eye irritation	Result		:	Skin irritation	
Serious eye damage/eye irritation Product: Species : Rabbit Result : Mild eye irritation Method : OECD Test Guideline 405 Components: : Kaolin: : Species : Rabbit Result : No eye irritation Species : No eye irritation Species : No eye irritation Sodium lignosulfonate: : Result : Eye irritation citric acid: :	Quartz	:			
Product: Species : Rabbit Result : Mild eye irritation Method : OECD Test Guideline 405 Components: . Kaolin: . Species : Rabbit Result : No eye irritation Species : No eye irritation Sodium lignosulfonate: . Result : Eye irritation citric acid: .	Result		:	No skin irritation	
Species : Rabbit Result : Mild eye irritation Method : OECD Test Guideline 405 Components: Kaolin: Species Species Result No eye irritation Sodium lignosulfonate: Result : Eye irritation	Seriou	s eye damage/eye ir	ritati	on	
Species : Rabbit Result : Mild eye irritation Method : OECD Test Guideline 405 Components: Kaolin: Species Species Result No eye irritation Sodium lignosulfonate: Result : Eye irritation	Produc	:t:			
Result : Mild eye irritation Method : OECD Test Guideline 405 Components: Kaolin: Species : Result : Result : Sodium lignosulfonate: Result : Example Result : Example Components:	-		:	Rabbit	
Method : OECD Test Guideline 405 Components: Kaolin: Species Species : Result : No eye irritation Sodium lignosulfonate: Result : Eye irritation citric acid:			:		
Kaolin: Result Rabbit Species : Rabbit Result : No eye irritation Sodium lignosulfonate: : Eye irritation Result : Eye irritation citric acid: : :	Method		:		eline 405
Species : Rabbit Result : No eye irritation Sodium lignosulfonate:	Compo	onents:			
Result : No eye irritation Sodium lignosulfonate: Eye irritation Result : Eye irritation citric acid: : Eye irritation	Kaolin:	:			
Result : No eye irritation Sodium lignosulfonate: Eye irritation Result : Eye irritation citric acid: : Eye irritation		3	:	Rabbit	
Result : Eye irritation citric acid:			:	No eye irritation	
citric acid:	Sodiun	n lignosulfonate:			
	Result		:	Eye irritation	
	citric a	cid:			
			:	Eve irritation	



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Sodiu	m N-methyl-N-oleoy	ltaurine:	
Specie		: Rabbit	
Result		: Eye irritation	
Disod	ium maleate:		
Specie		: Rabbit	
Result		: Eye irritation	
Quart	z:		
Result	:	: No eye irritat	ion
Respi	ratory or skin sensi	tisation	
<u>Produ</u>	ict:		
Test T			node assay (LLNA)
Specie		: Mouse	
Asses Metho			use skin sensitisation. Guideline 429
Metho	u	. OLOD Test	
<u>Comp</u>	onents:		
	xifen-methyl:		
Rema	rks	: Did not demo	onstrate the potential for contact allergy in mic
Rema	rks	: For respirato	ry sensitization:
		No relevant	
	ulam (ISO):		
Rema	rks	: Did not caus pigs.	e allergic skin reactions when tested in guinea
Rema	rks	: For respirato	ry sensitization:
		No relevant o	
Cloqu	intocet:		
Asses		: Does not cau	use skin sensitisation.
Rema			onstrate the potential for contact allergy in mic
Rema	rks		ry sensitization:
		No relevant o	data found.
Sodiu	m lignosulfonate:		
Rema	-	: Did not caus	e allergic skin reactions when tested in guinea
		pigs.	
Rema	rks	: For respirato	ry sensitization:
		No relevant of	



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Sodi	um N-methyl-N-oleoyl	aurine:	
Spec	• •	Guinea pigDoes not cause skin sensitisation.	
Diso	dium maleate:		
Spec	essment	 Maximisation Test Guinea pig The product is a skin sensitiser, sub-category 1B. OECD Test Guideline 406 	
		 Local lymph node assay (LLNA) Mouse The product is a skin sensitiser, sub-category 1B. OECD Test Guideline 429 	
Gern	n cell mutagenicity		
<u>Com</u>	ponents:		
Hala	uxifen-methyl:		
	n cell mutagenicity - essment	: In vitro genetic toxicity studies were negative.	
	sulam (ISO):		
	n cell mutagenicity - essment	: In vitro genetic toxicity studies were negative., Animal toxicity studies were negative.	genetic
Cloq	uintocet:		
	n cell mutagenicity - essment	: In vitro genetic toxicity studies were negative.	
	um lignosulfonate:		
	n cell mutagenicity - essment	: In vitro genetic toxicity studies were negative.	
	c acid:		
	n cell mutagenicity - essment	: In vitro genetic toxicity studies were negative., Animal toxicity studies were negative.	genetic
Sodi	um N-methyl-N-oleoyl	aurine:	
	n cell mutagenicity - essment	: In vitro genetic toxicity studies were negative.	
Quai	rtz:		
	n cell mutagenicity - essment	: In vitro genetic toxicity studies were negative in some and positive in other cases.	cases
Carc	inogenicity		
Prod Carc ment	inogenicity - Assess-	: Animal testing did not show any carcinogenic effects.	



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<u>Comp</u>	onents:					
Halaux	cifen-methyl:					
Carcin ment	ogenicity - Assess-	:	For similar active cancer in laborat	ingredient(s)., Halauxifen., Did not cause ory animals.		
	ulam (ISO):		Did not ocupe of			
ment	ogenicity - Assess-	:		ncer in laboratory animals.		
Cloqui	intocet:					
Carcin ment	ogenicity - Assess-	:		e ingredient(s)., Cloquintocet-mexyl., Did n aboratory animals.		
Kaolin	:					
Carcin ment	ogenicity - Assess-	:	Animal testing di	d not show any carcinogenic effects.		
citric a	acid:					
Carcin ment	ogenicity - Assess-	:	Did not cause ca	ncer in laboratory animals.		
Quartz	:					
Carcin ment	ogenicity - Assess-	:	Human carcinog	en.		
			Has caused cancer in humans., Has caused cancer in labora tory animals.			
Repro	ductive toxicity					
	onents:					
Halaux	kifen-methyl:					
	ductive toxicity - As-		did not interfere Has been toxic to	e ingredient(s)., Halauxifen., In animal stud with reproduction. o the fetus in laboratory animals at doses er., Did not cause birth defects in laborato		
florasi	dam (100);					
	ulam (ISO):					
	ductive toxicity - As-	:	Did not cause bi	, did not interfere with reproduction. th defects or other effects in the fetus eve sed toxic effects in the mother.		
Reproo sessm	ductive toxicity - As-	:	Did not cause bi	th defects or other effects in the fetus eve		
Reprod sessm	ductive toxicity - As- ent intocet: ductive toxicity - As-		Did not cause bi doses which cau In animal studies For similar active	th defects or other effects in the fetus eve sed toxic effects in the mother. , did not interfere with reproduction. ingredient(s)., Cloquintocet-mexyl., Did n		
Reprod sessm Cloqui Reprod	ductive toxicity - As- ent intocet: ductive toxicity - As- ent		Did not cause bi doses which cau In animal studies For similar active cause birth defed	th defects or other effects in the fetus even sed toxic effects in the mother.		



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sessment			Did not cause tory animals.	pirth defects or any other fetal effects in labora-
Sodiu	m N-methyl-N-oleoy	Itauri	ne:	
Repro sessm	ductive toxicity - As- nent	:	Screening stud reproduction.	ies suggest that this material does not affect
Quart	z:			
Repro sessm	ductive toxicity - As- nent	:		erial(s):, Did not cause birth defects or any ets in laboratory animals.
стот	- single exposure			
<u>Produ</u>	<u>ict:</u>			
Asses	sment	:	Evaluation of a an STOT-SE to	vailable data suggests that this material is not xicant.
<u>Comp</u>	oonents:			
Halau	xifen-methyl:			
Asses	sment	:	Available data a specific target of	are inadequate to determine single exposure organ toxicity.
Cloqu	lintocet:			
Asses	sment	:	Evaluation of a an STOT-SE to	vailable data suggests that this material is not xicant.
Kaolii	n:			
Asses	sment	:	Evaluation of a an STOT-SE to	vailable data suggests that this material is not xicant.
citric	acid:			
Asses	sment	:	Available data a specific target o	are inadequate to determine single exposure organ toxicity.
Urea,	polymer with formal	dehy	de:	
Asses	sment	:	Evaluation of a an STOT-SE to	vailable data suggests that this material is not xicant.
Sodiu	ım N-methyl-N-oleoy	Itauri	ne:	
Asses	sment	:	Evaluation of a an STOT-SE to	vailable data suggests that this material is not xicant.
Disod	lium maleate:			
Targe	sure routes t Organs sment	:	Inhalation Respiratory sys May cause resp	item biratory irritation.



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	Quartz				
	SSESS		:	Evaluation of avail an STOT-SE toxic	lable data suggests that this material is not cant.
s	втот -	repeated exposure			
P	Produc	:t:			
A	ssess	ment	:	Evaluation of avail an STOT-RE toxic	lable data suggests that this material is not cant.
<u>C</u>	Compo	onents:			
G	Quartz	:			
А	Ssess	ment	:	The substance or organ toxicant, sin	mixture is not classified as specific target gle exposure.
R	Repeat	ed dose toxicity			
<u>C</u>	Compo	onents:			
н	lalaux	ifen-methyl:			
	Remark	-	:	In animals, effects gans: Kidney. Liver. Thyroid.	have been reported on the following or-
fI	lorasu	lam (ISO):			
	Remark	• •	:	In animals, effects gans: Kidney.	have been reported on the following or-
C	loqui	ntocet:			
	Remark		:		e data, repeated exposures are not antici- nificant adverse effects.
K	Caolin:				
R	Remark	KS	:		ve exposure to crystalline silica may cause ssive and disabling disease of the lungs.
s	Sodiun	n lignosulfonate:			
	Remark	-	:		e data, repeated exposures are not antici- nificant adverse effects.
с	itric a	cid:			
R	Remark	S	:		e data, repeated exposures are not antici- inificant adverse effects.

Sodium N-methyl-N-oleoyltaurine:



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Remar	ks			ole data, repeated exposures are not antici- ignificant adverse effects.
Quartz	:			
Remar	ks	(gans: Kidney. Repeated exces	ts have been reported on the following or- sive exposure to crystalline silica may cause essive and disabling disease of the lungs.
Aspira	tion toxicity			
<u>Produ</u> Based	<u>ct:</u> on physical properties	s. not li	kelv to be an as	piration hazard.
	onents:	,		
	kifen-methyl:			
	on physical properties	s, not li	kely to be an as	piration hazard.
florası	ılam (ISO):			
Based	on physical properties	s, not li	kely to be an as	piration hazard.
Cloqui	intocet:			
Based	on physical properties	s, not li	kely to be an as	piration hazard.
Kaolin	:			
Based	on physical properties	s, not li	kely to be an as	piration hazard.
Sodiu	n lignosulfonate:			
Based	on available informati	on, as	piration hazard o	ould not be determined.
citric a	acid:			
Based	on physical properties	s, not li	kely to be an as	piration hazard.
Urea, j	oolymer with formald	dehydo):	
Based	on physical properties	s, not li	kely to be an as	piration hazard.
Sodiu	n N-methyl-N-oleoyl	taurin	:	
Based	on available informati	on, as	piration hazard o	could not be determined.
Disodi	um maleate:			
Based	on physical properties	s, not li	kely to be an as	piration hazard.
Quartz	::			
Based	on physical properties	s, not li	kely to be an as	piration hazard.





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12. ECOLO	GICAL INFORMATION	1		
Ecoto	xicity			
<u>Produ</u>	<u>ct:</u>			
Toxicit	y to fish	:	Material is very	milar material(s): highly toxic to aquatic organisms on an acute 50 <0.1 mg/L in the most sensitive species).
			Exposure time: 9 Test Type: semi	
	ry to daphnia and other c invertebrates	:	Exposure time: 4 Test Type: semi	
Toxicit plants	y to algae/aquatic	:	mg/I Exposure time: 7	kirchneriella subcapitata (green algae)): 0,27 72 h Test Guideline 201
			Exposure time:	gibba (gibbous duckweed)): 0,0087 mg/l 7 d Test Guideline 221
			Exposure time:	gibba (gibbous duckweed)): 0,0026 mg/l 7 d Test Guideline 221
			ErC50 (Myriophy Exposure time:	yllum spicatum): 0,0025 mg/l 14 d
			NOEC (Myrioph Exposure time:	yllum spicatum): 0,00098 mg/l 14 d
			0,0512 mg/l Exposure time: 7	kirchneriella subcapitata (green algae)): 72 h Test Guideline 201
			0,0505 mg/l Exposure time:	kirchneriella subcapitata (green algae)): 72 h Test Guideline 201
Toxicit ganisn	ry to soil dwelling or- ns	:	LC50 (Eisenia fe Exposure time: ⁻ End point: morta	





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	Toxicity isms	to terrestrial organ-	:	oral LD50 (Colinus mg/kg bodyweight End point: mortalit	
				oral LD50 (Apis m Exposure time: 48 End point: mortalit Method: OECD Te	У
				contact LD50 (Apis Exposure time: 48 End point: mortalit Method: OECD Te	У
	Compo	nents:			
	Halauxi	fen-methyl:			
	Toxicity	to fish	:		is very highly toxic to aquatic organisms on C50/EC50 <0.1 mg/L in the most sensitive
				LC50 (Rainbow tro Exposure time: 96 Test Type: static te	
				LC50 (Pimephales Exposure time: 96	s promelas (fathead minnow)): > 3,22 mg/l h
		to daphnia and other invertebrates	:	EC50 (Daphnia ma Exposure time: 48 Test Type: static te Method: OECD Te	est
	Toxicity plants	to algae/aquatic	:	ErC50 (Pseudokiro mg/l Exposure time: 96	chneriella subcapitata (green algae)): > 3,0 h
				ErC50 (Myriophylle End point: Growth Exposure time: 14	
		or (Acute aquatic tox-	:	1.000	
	icity) Toxicity icity)	to fish (Chronic tox-	:	NOEC (Pimephale End point: Other Test Type: flow-the	es promelas (fathead minnow)): 0,259 mg/l rough test
				NOEC (Cyprinodo 0,00272 mg/l Exposure time: 36 Test Type: flow-the	
		to daphnia and other invertebrates (Chron- y)	:	NOEC (Daphnia m End point: number Exposure time: 21	



/ersion I.0	Revision Date: 12.05.2022		DS Number: 00080005258	Date of last issue: - Date of first issue: 12.05.2022			
			Test Type: semi-s	static test			
	tor (Chronic aquatic	:	: 1.000				
toxicity Toxicit	Toxicity to microorganisms		EC50 (activated sludge): > 981 mg/l Exposure time: 1 d				
Toxicit ganisn	ry to soil dwelling or- ns	:	LC50 (Eisenia feti Exposure time: 14 End point: mortali				
Toxicit isms	y to terrestrial organ-	:	basis (LD50 > 200	Il is practically non-toxic to birds on an acute 00 mg/kg)., Material is practically non-toxic to basis (LC50 > 5000 ppm).			
			dietary LC50 (Col ppm Exposure time: 5 Method: Other gu				
			dietary LC50 (Ana ppm Exposure time: 5 Method: Other gu				
			oral LD50 (Colinu mg/kg bodyweigh End point: mortali				
			contact LD50 (Ap Exposure time: 48 End point: mortali				
			oral LD50 (Apis m Exposure time: 48 End point: mortali				
	xicology Assessment aquatic toxicity	:	Very toxic to aqua	atic life.			
Chron	ic aquatic toxicity	:	Very toxic to aqua	atic life with long lasting effects.			
floras	ulam (ISO):						
	y to fish	:		Il is very highly toxic to aquatic organisms on C50/EC50 <0.1 mg/L in the most sensitive			
			Exposure time: 96 Test Type: static t				
	y to daphnia and other cinvertebrates	:	EC50 (Daphnia m Exposure time: 48	nagna (Water flea)): > 292 mg/l 3 h			



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			Test Type: static to Method: OECD Te	est st Guideline 202 or Equivalent
Toxi plan	icity to algae/aquatic its	:	0,00894 mg/l End point: Growth Exposure time: 72 Test Type: static to	h
			EC50 (Myriophyllu End point: Growth Exposure time: 14	
	actor (Acute aquatic tox-	:	100	
icity Toxi icity	icity to fish (Chronic tox-	:	NOEC (Oncorhynd End point: mortalit Exposure time: 28 Test Type: flow-th	d
			NOEC (Pimephale End point: Other Exposure time: 33 Test Type: flow-th	
aqua	icity to daphnia and other atic invertebrates (Chron- xicity)	:	NOEC (Daphnia m End point: growth Exposure time: 21 Test Type: semi-s	
			MATC (Maximum magna (Water flea End point: growth Exposure time: 21 Test Type: semi-s	d
	actor (Chronic aquatic	:	100	
	city) icity to soil dwelling or- isms	:	LC50 (Eisenia feti Exposure time: 14	da (earthworms)): > 1.320 mg/kg d
Toxi isms	icity to terrestrial organ- s	:	(LD50 between 50	is slightly toxic to birds on an acute basis 1 and 2000 mg/kg)., Material is practically on a dietary basis (LC50 > 5000 ppm).
			oral LD50 (Coturn bodyweight.	x japonica (Japanese quail)): 1047 mg/kg
			dietary LC50 (Ana ppm Exposure time: 8 d	s platyrhynchos (Mallard duck)): > 5.000
			oral LD50 (Apis m Exposure time: 48	ellifera (bees)): > 100 micrograms/bee h



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			contact LD50 (Api Exposure time: 48	s mellifera (bees)): > 100 micrograms/bee h
Cloqu	uintocet:			
Toxici	ty to fish	:		I is slightly toxic to aquatic organisms on ar //EC50 between 10 and 100 mg/L in the ecies tested).
			LC50 (Sheepshea mg/l Exposure time: 96 Test Type: static t	
	ty to daphnia and other ic invertebrates	:	EC50 (Oyster she Exposure time: 96	II (Crassostrea virginica)): > 110 mg/l 5 h
			LC50 (Mysid shrin Exposure time: 96 Test Type: semi-s	
Toxici plants	ty to algae/aquatic	:	ErC50 (Pseudokir mg/l Exposure time: 72 Test Type: static t	
			ErC50 (Skeletone Exposure time: 96	ma costatum (marine diatom)): 12,5 mg/l b h
			ErC50 (Anabaena Exposure time: 96	flos-aquae (cyanobacterium)): 23,7 mg/l i h
Toxici icity)	ty to fish (Chronic tox-	:	NOEC (Pimephale Exposure time: 33 Test Type: flow-th	
Toxici isms	ty to terrestrial organ-	:	Remarks: Materia basis (LD50 > 200	l is practically non-toxic to birds on an acu 00 mg/kg).
			oral LD50 (Colinus mg/kg bodyweight	s virginianus (Bobwhite quail)): > 2250 t.
			contact LD50 (Api Exposure time: 48	s mellifera (bees)): > 200 μg/bee s h
	um lignosulfonate: ity to fish	:		l is practically non-toxic to aquatic organ- basis (LC50/EC50/EL50/LL50 >100 mg/L species tested).
			LC50 (Pimephales Exposure time: 96	s promelas (fathead minnow)): 615 mg/l 5 h
Toxici	ty to daphnia and other	:	LC50 (Daphnia ma	agna (Water flea)): > 100 mg/l





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aquatic invertebrates				
citric	acid:			
Toxici	ty to fish	:		is practically non-toxic to aquatic organ- basis (LC50/EC50/EL50/LL50 >100 mg/L in species tested).
			Exposure time: 96 Test Type: static te	
			Exposure time: 96 Test Type: static te	
	ty to daphnia and other c invertebrates	:	Exposure time: 24 Test Type: Static	agna (Water flea)): > 1.535 mg/l h est Guideline 202 or Equivalent
Uroa	polymer with formalde	bv <i>i</i>	40.	
	ty to fish	:		
	ty to daphnia and other c invertebrates	:	EC50 (Daphnia ma Exposure time: 48	agna (Water flea)): > 1.000 mg/l h
Sodiu	m N-methyl-N-oleoylta	uri	ne:	
Toxici	ty to fish	:	LC50 (Danio rerio Exposure time: 96	(zebra fish)): 1,32 mg/l h
	ty to daphnia and other c invertebrates	:	EC50 (Daphnia ma Exposure time: 48	agna (Water flea)): 5,76 mg/l h
Toxici plants	ty to algae/aquatic	:	EC50 (Desmodesr Exposure time: 72	mus subspicatus (green algae)): 197 mg/l h
plants Toxici	ty to daphnia and other c invertebrates (Chron-	:	Exposure time: 72	h nagna (Water flea)): 2 mg/l
plants Toxici aquati	ty to daphnia and other c invertebrates (Chron- city)	:	Exposure time: 72 NOEC (Daphnia m	h nagna (Water flea)): 2 mg/l
plants Toxici aquati ic toxic Quart	ty to daphnia and other c invertebrates (Chron- city)	:	Exposure time: 72 NOEC (Daphnia m Exposure time: 21	h nagna (Water flea)): 2 mg/l
plants Toxici aquati ic toxic Quart Toxici	ty to daphnia and other c invertebrates (Chron- city) z:	:	Exposure time: 72 NOEC (Daphnia m Exposure time: 21 Remarks: Not expo	h nagna (Water flea)): 2 mg/l d



ersion 0	Revision Date: 12.05.2022		DS Number: 00080005258	Date of last issue: - Date of first issue: 12.05.2022
Develo		b :1:4.7		
	tence and degrada	DIIITY		
	onents:			
	kifen-methyl: gradability	:	Halauxifen. Material is expe	degradable similar active ingredient(s). ected to biodegrade very slowly (in the env s to pass OECD/EEC tests for ready biode
florası	ulam (ISO):			
	radability	:		rial is expected to biodegrade very slowly it). Fails to pass OECD/EEC tests for read
Bioche mand (emical Oxygen De- (BOD)	:	0,012 kg/kg Incubation time	: 5 d
ThOD		:	0,85 kg/kg	
Stabilit	y in water	:	Degradation ha	lf life: > 30 d
Photoc	degradation	:	Rate constant: Method: Estima	7,04E-11 cm3/s ated.
	m lignosulfonate: gradability	:		rial is expected to biodegrade very slowly it). Fails to pass OECD/EEC tests for read
Photoc	degradation	:	Rate constant: Method: Estima	1,089E-10 cm3/s





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Biode	Biodegradability		Material is ultimate	l is expected to be readily biodegradable. ely biodegradable (reaches > 70% minerali- est(s) for inherent biodegradability).
			aerobic Result: Readily bio Biodegradation: 9 Exposure time: 28 Method: OECD Te Remarks: 10-day	97 % 3 d est Guideline 301B or Equivalent
Sodiı	Im N-methyl-N-oleoyl	tauri	ne:	
	gradability	:	Result: Readily bid Biodegradation: 8 Exposure time: 28 Method: OECD Te Remarks: 10-day	30 % 3 d est Guideline 301B or Equivalent Window: Pass biodegradable. Passes OECD test(s) for
Quari Biode	z: gradability	:	Remarks: Biodegr	adation is not applicable.
Bioad	cumulative potential		-	
Com	oonents:			
Halau	xifen-methyl:			
	cumulation	:	Species: Lepomis Bioconcentration f Exposure time: 42 Temperature: 21,8 Concentration: 0,	2 d 3 °C
	on coefficient: n- ol/water	:		centration potential is moderate (BCF be- 00 or Log Pow between 3 and 5).
floras	sulam (ISO):			
	cumulation	:	Species: Fish Bioconcentration f Exposure time: 28 Temperature: 13 ° Method: Measure	3 d 2C
Partiti	on coefficient: n-	:		



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octanc	ol/water	log Pow: -1,22 pH: 7,0 Remarks: Bioconcentration potential is low (BCF < 100 or Pow < 3).	Log
Partitio	intocet: on coefficient: n- ol/water	: log Pow: 2,12 Method: Estimated. Remarks: Bioconcentration potential is low (BCF < 100 or Pow < 3).	Log
	m lignosulfonate: cumulation	: Species: Fish Bioconcentration factor (BCF): 3,2	
	on coefficient: n- bl/water	: log Pow: -3,45 Method: Estimated. Remarks: Bioconcentration potential is low (BCF < 100 or Pow < 3).	Log
citric a Bioaco	acid: cumulation	: Species: Fish Bioconcentration factor (BCF): 0,01 Method: Measured	
	on coefficient: n- bl/water	 log Pow: -1,72 (20 °C) Method: Measured Remarks: Bioconcentration potential is low (BCF < 100 or Pow < 3). 	Log
Urea,	polymer with forma	ehyde:	
	on coefficient: n- bl/water	: Remarks: No data available for this product.	
Sodiu	m N-methyl-N-oleoy	aurine:	
	on coefficient: n- ol/water	 Pow: 1,36 (20 °C) Remarks: Bioconcentration potential is low (BCF < 100 or Pow < 3). 	Log
Partitio	ium maleate: on coefficient: n- ol/water	: Remarks: No relevant data found.	
	z: on coefficient: n- ol/water	: Remarks: Partitioning from water to n-octanol is not applicable.	a-



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	Mobilit	y in soil			
	Compo	onents:			
	Halauxifen-methyl: Distribution among environ- mental compartments		:	Koc: 5684 Remarks: Expecte 5000).	ed to be relatively immobile in soil (Koc >
	florasu	lam (ISO):			
	Distribution among environ- mental compartments		:		al for mobility in soil is very high (Koc be-
	Stability	/ in soil	:	Dissipation time: (),7 - 4,5 d
	Cloqui	ntocet:			
		ition among environ- compartments	:	Method: Estimate	d. al for mobility in soil is medium (Koc between
	Sodiun	n lignosulfonate:			
	Distribu	ition among environ- compartments	:	Method: Estimate	d. ed to be relatively immobile in soil (Koc >
	citric a				
		tion among environ- compartments	:	Remarks: No relev	vant data found.
	Quartz: Distribution among environ- mental compartments		:	Remarks: No relev	vant data found.
	Other a	adverse effects			
	Compo	onents:			
	Halaux	ifen-methyl:			
		of PBT and vPvB	:	lating and toxic (P	not considered to be persistent, bioaccumu- BT). This substance is not considered to be d very bioaccumulating (vPvB).
	Ozone-	Depletion Potential	:		ostance is not on the Montreal Protocol list t deplete the ozone layer.
	florasu	lam (ISO):			
		of PBT and vPvB	:	lating and toxic (P	not considered to be persistent, bioaccumu- BT). This substance is not considered to be d very bioaccumulating (vPvB).

SAFETY DATA SHEET



QUELEX[™] 200WG Herbicide

rsion)	Revision Date: 12.05.2022		DS Number: Date of last issue: - 00080005258 Date of first issue: 12.05.2022
Ozone-Depletion Potential		:	Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.
	intocet: s of PBT and vPvB sment	:	This substance is not considered to be persistent, bioaccum lating and toxic (PBT). This substance is not considered to b very persistent and very bioaccumulating (vPvB).
Ozone-Depletion Potential		:	Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.
Kaolin	:		
Results assess	s of PBT and vPvB sment	:	This substance is not considered to be persistent, bioaccum lating and toxic (PBT). This substance is not considered to b very persistent and very bioaccumulating (vPvB).
Ozone	-Depletion Potential	:	Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.
Sodiur	m lignosulfonate:		
Results assess	s of PBT and vPvB sment	:	This substance has not been assessed for persistence, bioa cumulation and toxicity (PBT).
Ozone	-Depletion Potential	:	Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.
citric a	acid:		
Results assess	s of PBT and vPvB sment	:	This substance is not considered to be persistent, bioaccum lating and toxic (PBT). This substance is not considered to b very persistent and very bioaccumulating (vPvB).
Ozone	Ozone-Depletion Potential		Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.
Urea, j	oolymer with formald	lehy	de:
Results assess	s of PBT and vPvB	:	This substance has not been assessed for persistence, bioa cumulation and toxicity (PBT).
Ozone	-Depletion Potential	:	Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.
Sodiu	m N-methyl-N-oleoylt	auri	ine:
	s of PBT and vPvB	:	This substance is not considered to be persistent, bioaccum lating and toxic (PBT). This substance is not considered to b very persistent and very bioaccumulating (vPvB).
Ozone	-Depletion Potential	:	Remarks: This substance is not on the Montreal Protocol list

Disodium maleate:



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Results of PBT and vPvB assessment		:	: This substance has not been assessed for persistence, bioac cumulation and toxicity (PBT).			
Ozon	Ozone-Depletion Potential		Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.			
	tz: Its of PBT and vPvB ssment	:	This substance ha	as not been assessed for persistence, bioac- xicity (PBT).		
Ozon	e-Depletion Potential	:		bstance is not on the Montreal Protocol list t deplete the ozone layer.		

13. DISPOSAL CONSIDERATIONS

Disposal m	ethods
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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 other- wise contaminated. It is the responsibility of the waste gener ator to determine the toxicity and physical properties of the material generated to determine the proper waste identifica- tion and disposal methods in compliance with applicable regu lations. If the material as supplied becomes a waste, follow all appli- cable regional, national and local laws.	/aste from residues	listing may not apply if the material has been used or other- wise contaminated. It is the responsibility of the waste gener ator to determine the toxicity and physical properties of the material generated to determine the proper waste identifica- tion and disposal methods in compliance with applicable regu- lations. If the material as supplied becomes a waste, follow all appli-	-
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14. TRANSPORT INFORMATION

ADR UN number Proper shipping name	:	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Class		(Halauxifen-methyl, Florasulam) 9
0.000	:	а Ш
Packing group Labels	:	9
Hazard Identification Number	:	90
	÷	
Tunnel restriction code	:	(-)
UNRTDG		
UN number	:	UN 3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
1 11 0		N.O.S.
		(Halauxifen-methyl, Florasulam)
Class	:	9
Packing group	÷	
Labels		9
Labolo	•	•



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IATA-DGR UN/ID No. Proper shipping name Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passen- ger aircraft)		:	UN 3077 Environmentally ha (Halauxifen-methy 9 III Miscellaneous 956 956	azardous substance, solid, n.o.s. /l, Florasulam)
IMDG-Code UN number Proper shipping name Class Packing group Labels EmS Code Marine pollutant Remarks		:	UN 3077 ENVIRONMENTA N.O.S. (Halauxifen-methy 9 III 9 F-A, S-F yes Stowage category	

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

Not applicable for product as supplied.

Further information

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.

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

16. OTHER INFORMATION

Full text of H-Statements

H303	May be harmful if swallowed.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.



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H317 H319 H335 H350 H400 H401 H402 H410 H411		May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May cause cancer. Very toxic to aquatic life. Toxic to aquatic life. Harmful to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.				
Full te	xt of other abbrev	viations				
	c Acute c Chronic it. rit. ens. SE	 Long-term (chr Carcinogenicity Eye irritation Skin irritation Skin sensitisat Specific target Europe. Direct 				
RU OE	E	: SanPiN 1.2.36 2.17 Maximum	85-21 Table 2.1, Table 2.8, Table 2.16 & Table permissible concentrations (MPC) in the air of			
RU OE	7/EC / TWA EL / MPC-STEL EL / MPC-TWA					

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; 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; 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 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature;



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SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; 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

Product code: GF-3313

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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