

Version	Revision Date:	SDS Number:	Date of last issue: 04.05.2021
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier	
Trade name :	VIRKON AQUATIC
Product code :	0000000057804716
UFI :	EW33-R0XP-N00J-VM9J
1.2 Relevant identified uses of the	substance or mixture and uses advised against
Use of the Sub- : stance/Mixture	Disinfectants
1.3 Details of the supplier of the sa	fety data sheet
Company :	Antec International Limited Windham Road CO10 2XD Sudbury / Suffolk Chilton Industrial Estate, Great Britain
Responsible Department :	+49 221 8885 2288 infosds@lanxess.com
1.4 Emergency telephone number	
Emergency telephone number :	For 24/7 multilingual emergency please call CHEMTREC EMEA: +44 20 3885 0382 and mention CCN 1001748.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

I	Skin irritation, Category 2	H315: Causes skin irritation.
I	Serious eye damage, Category 1	H318: Causes serious eye damage.
	Long-term (chronic) aquatic hazard, Cat- egory 3	H412: Harmful to aquatic life with long lasting effects.





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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H315 Causes skin irritation.H318 Causes serious eye damage.H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	:	Prevention:P264Wash skin thoroughly after handling.P273Avoid release to the environment.P280Wear protective gloves/ eye protection/ face protection.
		Response:P302 + P352IF ON SKIN: Wash with plenty of water.P305 + P351 + P338 + P310IF IN EYES: Rinse cautiouslywith water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call aPOISON CENTER/ doctor.P332 + P313If skin irritation occurs: Get medical advice/attention.P362 + P364Take off contaminated clothing and wash it before reuse.
		Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label: pentapotassium bis(peroxymonosulphate) bis(sulphate) Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts potassium hydrogensulphate

Additional Labelling

EUH208

Contains dipotassium peroxodisulphate. May produce an allergic reaction.

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.





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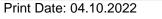
SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8 274-778-7	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 50 - < 70
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts	68411-30-3 270-115-0	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 10 - < 20
malic acid	6915-15-7 230-022-8	Eye Irrit. 2; H319	>= 1 - < 10
sulphamidic acid	5329-14-6 226-218-8 016-026-00-0	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	>= 2.5 - < 10
potassium hydrogensulphate	7646-93-7 231-594-1 016-056-00-4	Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory sys- tem)	>= 3 - < 5
sodium toluenesulphonate	12068-03-0 235-088-1	Skin Irrit. 2; H315 Eye Irrit. 2; H319	>= 1 - < 10
dipotassium peroxodisulphate	7727-21-1 231-781-8 016-061-00-1	Ox. Sol. 3; H272 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory sys- tem)	>= 1 - < 10

For explanation of abbreviations see section 16.







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SECTION 4: First aid measures

4.1 Description of first aid measures				
General advice	 Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended. 			
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.			
If inhaled	 If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician. 			
In case of skin contact	 If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes. 			
In case of eye contact	 Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. 			
If swallowed	 Keep respiratory tract clear. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. 			
4.2 Most important symptoms an	d effects, both acute and delayed			
Risks	: Causes skin irritation. Causes serious eye damage.			
4.3 Indication of any immediate n	nedical attention and special treatment needed			
Treatment	· Treat symptomatically			

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam or dry chemical.





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	Unsuita media	able extinguishing	:	Carbon dioxide (C High volume wate	
5.2	Special	hazards arising from	the	substance or mix	kture
	Specifi fighting	c hazards during fire-	:	Do not allow run-o courses.	off from fire fighting to enter drains or water
	Hazarc ucts	lous combustion prod-	:	Sulphur oxides Metal oxides Carbon dioxide (C Carbon monoxide Nitrogen oxides (I Halogenated com	NOx)
5.3	Advice	for firefighters			
		I protective equipment	:	Wear self-contain essary.	ed breathing apparatus for firefighting if nec-
	Furthe	information	:	must not be disch Fire residues and	ted 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	:	Use personal protective equipment. Avoid dust formation.
		Avoid dust iornation.
		Avoid breathing dust.

6.2 Environmental precautions

Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
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6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Neutralize with chalk, alkali solution or ammonia.
		Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.





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SECTION 7: Handling and storage

7.1 Precautions for safe handling	g	
Advice on safe handling	:	Avoid formation of respirable particles. Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the ap- plication area. Dispose of rinse water in accordance with local and national regulations.
Advice on protection against fire and explosion	:	Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.
7.2 Conditions for safe storage, i	inc	luding any incompatibilities
Requirements for storage areas and containers	:	Protect from moisture.
		Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Do not store in unlabelled containers. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.
Advice on common storage	:	Keep away from alkalis.
Further information on stor- age stability	:	Keep in a dry place. Stable under recommended storage conditions.
7.3 Specific end use(s) Specific use(s)	:	No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.





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8.2 Exposure controls

Engineering measures

If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment					
Eye protection	:	Tightly fitting safety goggles			
Hand protection Material Wearing time	:	Butyl rubber - IIR < 60 min			
Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves. After contamina- tion with product change the gloves immediately and dispose of them according to relevant national and local regulations			
Skin and body protection	:	Wear suitable protective clothing.			
		Dust impervious protective suit Choose body protection according to the amount and concen- tration of the dangerous substance at the work place.			
Respiratory protection	:	In the case of dust or aerosol formation use respirator with an approved filter. Dust safety masks are recommended when the dust concentration is more than 10 mg/m3.			
Filter type	:	Recommended Filter type:			
		P2 filter			

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

		7 / 00
Melting point/range	:	No data available
Odour Threshold	:	No data available
Odour	:	odourless
Colour	:	pink
Physical state	:	solid
Appearance	:	powder





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	Boiling	point/boiling range	:	No data available	3
		explosion limit / Upper bility limit	:	No data available	
		explosion limit / Lower bility limit	:	No data available	9
	Flash p	oint	:	No data available)
	Decom	position temperature	:	> 50 °C	
	рН		:	2.35 - 2.65 Concentration: 1	%
	Viscosit Visc	ty osity, dynamic	:	No data available	
	Visc	osity, kinematic	:	No data available)
	Solubili Wate	ty(ies) er solubility	:	65 g/l	
	Solu	bility in other solvents	:	No data available	
	Partition octanol	n coefficient: n- /water	:	No data available	
	Vapour	pressure	:	No data available	2
	Relative	e density	:	No data available)
	Density		:	1.07 g/cm3 (20 °	C)
		characteristics icle Size Distribution	:	No data available	9
9.2 0	Other in	formation			
	Explosi	ves	:	No data available	9
	Oxidizir	ng properties	:	No data available	9
		able solids ning number	:	No data available)
	Self-ign	ition	:	No data available	9





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Evapo	ration rate	: No data availal	ble
Miscib	ility with water	: No data available	

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	Under normal conditions of storage and use, hazardous reac- tions will not occur. Stable under recommended storage conditions. Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Exposure to moisture

10.5 Incompatible materials

Materials to avoid	: Incompatible with strong bases and oxidizing agents. water
	Combustible substances
	Halogenated compounds
	Cyanides
	Incompatible with acids.
	brass
	Copper
	Metal salt.

10.6 Hazardous decomposition products

Hazardous decomposition	:	Sulphur oxides
products		Oxygen
		Chlorine
		Hypochlorites

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.





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Pro	oduct:		
Ac	ute oral toxicity		le and female): 4,123 mg/kg D Test Guideline 401
Act	ute inhalation toxicity	Exposure time Test atmosphe Assessment: 1 tion toxicity Remarks: the	ere: dust/mist The substance or mixture has no acute inhala- particle size measurements of the product indi- ot respirable and therefore not bioavailable by
Ac	ute dermal toxicity		le and female): > 5,000 mg/kg apolation according to Regulation (EC) No.
<u>Co</u>	mponents:		
pe	ntapotassium bis(peroxy	monosulphate) bis	s(sulphate):
Ac	ute oral toxicity		le and female): 500 mg/kg D Test Guideline 423
Ac	ute inhalation toxicity	Assessment: T tion toxicity	: 4 h
Act	ute dermal toxicity	Method: OECI	le and female): > 5,000 mg/kg D Test Guideline 402 apolation according to Regulation (EC) No.
Be	nzenesulfonic acid, C10-	13-alkyl derivs., so	odium salts:
Ac	ute oral toxicity		le and female): 1,080 mg/kg) Test Guideline 401
Act	ute dermal toxicity	Method: OECI GLP: yes Assessment: T toxicity	le and female): > 2,000 mg/kg D Test Guideline 402 The substance or mixture has no acute dermal age caused no mortality





ersion D	Revision Date: 27.06.2022	-	S Number: 3000008848	Date of last issue: 04.05.2021 Country / Language: GB / 6N (EN)
malic a	acid:			
Acute o	oral toxicity	:		and female): 3,500 mg/kg Fest Guideline 401
Acute i	nhalation toxicity	:	Exposure time: 4 Test atmosphere Method: OECD	
Acute o	dermal toxicity	:	LD50 (Rabbit, female): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: no	
sulpha	midic acid:			
Acute o	oral toxicity	:	LD50 (Rat, fema Method: OECD GLP: yes	le): 2,140 mg/kg Fest Guideline 401
Acute o	dermal toxicity	:	Method: OECD T GLP: yes	and female): > 2,000 mg/kg Fest Guideline 402 e substance or mixture has no acute derma
potass	ium hydrogensulph	ate:		
	oral toxicity		LD50 (Rat): 2,34	0 mg/kg
sodiun	n toluenesulphonate	:		
Acute of	oral toxicity	:	LD50 (Rat): 6,50	0 mg/kg
Acute of	dermal toxicity	:	LD50 (Rabbit): >	2,000 mg/kg
dipota	ssium peroxodisulpl	hate:		
Acute of	oral toxicity	:	LD50 (Rat): 700	mg/kg
Acute i	nhalation toxicity	:	LC0 (Rat): > 2.99 Exposure time: 4 Test atmosphere Remarks: Highes	h
Acute of	dermal toxicity	:	LD50 (Rabbit): >	10,000 mg/kg
Skin c	orrosion/irritation			
Causes	s skin irritation.			





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Produ	uct:		
Speci		: Rabbit	
Metho		: OECD Test Gu	ideline 404
Resul		: Irritating to skin	
<u>Comp</u>	oonents:		
penta	potassium bis(pero	xymonosulphate) bis	(sulphate):
Speci		: Rabbit	
Metho		: OECD Test Gu	ideline 404
Resul	t	: Causes burns.	
Benz	enesulfonic acid, C1	0-13-alkyl derivs., so	dium salts:
Speci	es	: Rabbit	
Metho	bd	: OECD Test Gu	ideline 404
Resul	t	: Irritating to skin	
GLP		: no	
malic	acid:		
Speci	es	: Rabbit	
Metho		: OECD Test Gu	ideline 404
Resul	t	: No skin irritatio	n
sulph	amidic acid:		
Speci	es	: Rabbit	
Metho		: OECD Test Gu	ideline 404
Resul	t	: Irritating to skin	
potas	sium hydrogensulp	hate:	
Asses	ssment	: Causes burns.	
sodiu	ım toluenesulphona	te:	
Speci	-	: Rabbit	
Resul		: Irritating to skin	
dipot	assium peroxodisul	phate:	
Speci	•	: Rabbit	
Metho		: OECD Test Gu	ideline 404
Resul		: Irritating to skin	
Serio	us eye damage/eye	irritation	
	es serious eye damage		





rsion)	Revision Date: 27.06.2022	SDS Number: 203000008848	Date of last issue: 04.05.2021 Country / Language: GB / 6N (EN)
Comp	oonents:		
nenta	potassium bis(pero	xymonosulnhate) l	his(sulnhate).
Speci		: Rabbit	
Metho			Guideline 405
Resul			
Resul	l	. RISK OF SERIC	us damage to eyes.
Benze	enesulfonic acid, C1	0-13-alkyl derivs.,	sodium salts:
Speci	es	: Rabbit	
Metho	bd	: OECD Test	Guideline 405
Resul	t	: Irreversible	effects on the eye
GLP		: yes	
malic	acid:		
		: Rabbit	
Speci			Quideline 405
Metho Resul			Guideline 405
Resul	l	: Irritating to e	yes.
sulph	amidic acid:		
Speci	es	: Rabbit	
Metho		: OECD Test	Guideline 405
Resul	t	: Irritating to e	yes.
sodiu	ım toluenesulphona	te:	
	-	: Rabbit	
Speci Resul			N/00
Resul	l	: Irritating to e	yes.
dipot	assium peroxodisul	phate:	
Resul	t	: Irritating to e	yes.
Respi	iratory or skin sensi	tisation	
-	sensitisation		
-			
Not cl	assified based on ava	ailable information.	
-	iratory sensitisation		
Not cl	assified based on ava	ailable information.	
Produ			
	sure routes	: Skin contact	
Speci		: Guinea pig	
Metho			Guideline 406
Resul	t	: Did not caus	e sensitisation on laboratory animals.
	sure routes	: Inhalation	
	65	: Mammal - si	pecies unspecified
Speci Metho		: Expert judge	



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Resu	lt	: Does not cau	use respiratory sensitisation.
Com	ponents:		
penta	apotassium bis(perc	xymonosulphate) b	bis(sulphate):
Expo	sure routes	: Skin contact	
Spec		: Guinea pig	
Meth			Guideline 406
Resu	lt	: Does not cau	use skin sensitisation.
Benz	enesulfonic acid, C	10-13-alkyl derivs., s	sodium salts:
Test	Туре	: Maximisatior	n Test
	sure routes	: Skin contact	
Spec		: Guinea pig	
Meth			Guideline 406
Resu GLP	lt	: Did not caus : yes	e sensitisation on laboratory animals.
02.			
malic	c acid:		
	sure routes	: Skin contact	
Spec		: Guinea pig	
Meth			Guideline 406
Resu	lt		e sensitisation on laboratory animals.
GLP		: yes	
sulpł	namidic acid:		
Resu	lt	: Did not caus	e sensitisation on laboratory animals.
sodiu	um toluenesulphona	te:	
Expo	sure routes	: Skin contact	
Spec	ies	: Guinea pig	
Meth			Guideline 406
Resu	lt	: Did not caus	e sensitisation on laboratory animals.
dipot	assium peroxodisu	phate:	
	sure routes	: Inhalation	
Spec		•	pecies unspecified
Resu	lt	: May cause s	ensitisation by inhalation.
Expo	sure routes	: Skin contact	
Spec		: Mouse	
Meth	od		Guideline 429
Resu	lt	: May cause s	ensitisation by skin contact.
		-	





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	Not cla	cell mutagenicity assified based on ava onents:	ilable information.	
		octassium bis(pero) oxicity in vitro	Metabolic activ	lammalian-Animal ation: with and without metabolic activation Test Guideline 476
				ation: with and without metabolic activation Test Guideline 471
			Metabolic activ	lammalian-Human ation: with and without metabolic activation Test Guideline 473
	Genoto	oxicity in vivo	: Species: Mamr Application Rou Method: OECD Result: negativ	ute: Oral 9 Test Guideline 474
	Benze	nesulfonic acid, C1	0-13-alkyl derivs., so	dium salts:
		oxicity in vitro	: Test Type: Am Test system: S Metabolic activ	es test almonella typhimurium ation: with and without metabolic activation Test Guideline 471
			Test system: C Metabolic activ	omosome aberration test in vitro hinese hamster ovary cells ation: without metabolic activation Test Guideline 473 e
			Test system: C Metabolic activ	omosome aberration test in vitro hinese hamster ovary cells ation: with metabolic activation Test Guideline 473





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		Test system Metabolic ac	n vitro mammalian cell gene mutation test Chinese hamster ovary cells tivation: with and without metabolic activation CD Test Guideline 476 tive
Genotoxicity in vivo		: Test Type: C Species: Mo Cell type: Bo Application F Result: nega GLP: no	ne marrow Route: Oral
		Test Type: d Species: Mo Application F Result: nega GLP: no	Route: Oral
malic	acid:		
Geno	toxicity in vitro	: Remarks: No cological tes	ot mutagenic in a standard battery of genetic toxi- ts.
sulph	amidic acid:		
Geno	toxicity in vitro	Metabolic ac	: Mammalian-Human tivation: with and without metabolic activation CD Test Guideline 487 tive
		Metabolic ac	: Mammalian-Animal tivation: with and without metabolic activation CD Test Guideline 476 tive
			tivation: with and without metabolic activation CD Test Guideline 471
sodiu	ım toluenesulphonate	:	
	toxicity in vitro		o mutagenic effect.
dinot	assium peroxodisulp	hate:	
-	toxicity in vitro		ot mutagenic in a standard battery of genetic toxi- ts.





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Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Effects on foetal develop- :	:	Remarks: No teratogenic or foetotoxic effects were found at all
ment		dose levels tested.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts:

Effects on fertility :	Test Type: Three-generation study Species: Rat, male and female Application Route: Oral Dose: 0 - 14 - 70 milligram per kilogram General Toxicity - Parent: NOAEL: 350 mg/kg body weight General Toxicity F1: NOAEL: 350 mg/kg body weight General Toxicity F2: NOAEL: 350 mg/kg body weight Fertility: NOAEL: 350 mg/kg body weight Result: Animal testing did not show any effects on fertility. GLP: no Remarks: Test results on an analogous product
Effects on foetal develop- : ment	Species: Rat, female Application Route: Oral General Toxicity Maternal: NOAEL: 300 mg/kg body weight Teratogenicity: NOAEL: 300 mg/kg body weight Result: No teratogenic effects GLP: no Remarks: Test results on an analogous product
malic acid:	
Effects on foetal develop- : ment	Remarks: No known significant effects or critical hazards.
STOT - single exposure	
Not classified based on available	information.
Components:	
potassium hydrogensulphate:	
Assessment :	May cause respiratory irritation.
dipotassium peroxodisulphate	
	• May aguag rearizatory irritation

Assessment : May cause respiratory irritation.





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STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

		. , ,
Species	:	Rat, male and female
LOAEL	:	> 1,000 mg/kg
Application Route	:	Oral
Exposure time	:	28 d
Number of exposures	:	7 days/week
Method	:	OECD Test Guideline 407
Remarks	:	Subacute toxicity
Species LOAEL Application Route	:	Rat, male and female 600 mg/kg Oral
Exposure time Number of exposures Method Remarks		90 d 7 days/week OECD Test Guideline 408 Subchronic toxicity

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts:

Species NOAEL LOAEL Application Route Exposure time Number of exposures GLP Remarks		Rat, male and female 85 mg/kg 145 mg/kg Oral 36 w daily no Subchronic toxicity
malic acid: Remarks	:	No known significant effects or critical hazards.
sodium toluenesulphonate:		
Species	:	Rat
NOAEL	:	114 mg/kg
Application Route	:	Oral
Exposure time	:	91 d
Method	:	OECD Test Guideline 408

Remarks

: Subchronic toxicity





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-	r ation toxicity lassified based on ava	ailable information.				
Furth	Further information					
Prod	uct:					
Rema	arks	: No data availal	ble			
SECTION	SECTION 12: Ecological information					
12.1 Toxic	12.1 Toxicity					
Prod	uct:					

Product:		
Toxicity to fish	:	LC50 (Salmo salar (Atlantic salmon)): 24.6 mg/l Exposure time: 96 h Method: Regulation (EC) No. 440/2008, Annex, C.1 Remarks: Fresh water
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 6.5 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: Fresh water
Toxicity to algae/aquatic plants	:	NOEC (Desmodesmus subspicatus (green algae)): 6.25 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Fresh water
Components:		
pentapotassium bis(peroxyn	noi	nosulphate) bis(sulphate):
Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 53 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 GLP: yes Remarks: Fresh water
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 3.5 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes Remarks: Fresh water
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (microalgae)): > 1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 GLP: yes Remarks: Fresh water





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			NOEC (Pseudoki mg/l Exposure time: 72 Method: OECD T GLP: yes Remarks: Fresh v	est Guideline 201			
Benz	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts:						
	rity to fish	:	LC50 (Pimephale Exposure time: 96 Analytical monitor	is promelas (fathead minnow)): 2.88 mg/l 6 h ring: yes est Guideline 203			
	tity to daphnia and other tic invertebrates	:	Exposure time: 48 Analytical monitor	ring: yes est Guideline 202			
Toxic plants	sity to algae/aquatic s	:	ErC50 (Pseudokin mg/l Exposure time: 72 Analytical monitor Method: OECD T GLP: no Remarks: Fresh v	ring: no est Guideline 201			
			EC10 (Pseudokiro mg/l Exposure time: 72 Analytical monitor Method: OECD T GLP: no Remarks: Fresh v	ring: no est Guideline 201			
Toxic icity)	bity to fish (Chronic tox-	:	NOEC: 0.23 mg/l Exposure time: 72 Species: Oncorhy Analytical monitor Method: OECD T GLP: no Remarks: Fresh v	/nchus mykiss (rainbow trout) ring: yes est Guideline 210			
	tity to daphnia and other tic invertebrates (Chron- icity)	:	NOEC: 1.18 mg/l Exposure time: 2 Species: Daphnia Analytical monitor	a magna (Water flea)			





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				Method: OECD Te GLP: no Remarks: Fresh w	
m	nalic a	cid:			
То	oxicity	to fish	:	LC50 (Danio rerio Exposure time: 96 Method: OECD Te GLP: yes Remarks: Fresh w	est Guideline 203
		to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48 Method: OECD Te GLP: yes Remarks: Fresh w	est Guideline 202
	oxicity lants	to algae/aquatic	:	EC50 (algae): > 1 Exposure time: 72 Method: OECD Te GLP: yes Remarks: Fresh w	2 h est Guideline 201
				NOEC (algae): 10 Exposure time: 72 Method: OECD Te GLP: yes Remarks: Fresh w	2 h est Guideline 201
รเ	ulphar	nidic acid:			
Т	oxicity	to fish	:	LC50 (Pimephales Exposure time: 96 Method: OECD Te GLP: no Remarks: Fresh w	est Guideline 203
		to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48 Method: OECD Te GLP: yes Remarks: Fresh w	est Guideline 202
	oxicity lants	to algae/aquatic	:	EC50 (Desmodes End point: Growth Exposure time: 72 Method: OECD Te GLP: yes Remarks: Fresh w	2 h est Guideline 201



SAFETY DATA SHEET According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



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				NOEC (Desmode: End point: Growth Exposure time: 72 Method: OECD Te GLP: yes Remarks: Fresh w	? h est Guideline 201
	Toxicity	to microorganisms	:	EC50 : > 200 mg/ End point: Respira Exposure time: 3 I Method: OECD Te GLP: yes Remarks: Fresh w	ation inhibition h est Guideline 209
	Toxicity icity)	to fish (Chronic tox-	:	NOEC: >= 60 mg/ Exposure time: 34 Species: Danio re Method: OECD Te	ł d rio (zebra fish)
		to daphnia and other invertebrates (Chron- ty)	:	NOEC: 19 mg/l Exposure time: 21 Species: Daphnia Method: OECD Te	magna (Water flea)
	sodium	toluenesulphonate:			
	Toxicity	-	:	LC50 (Oncorhync Exposure time: 96 Remarks: Fresh w	
		to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48 Remarks: Fresh w	
	Toxicity plants	to algae/aquatic	:	EC50 (Desmodes Exposure time: 72 Method: OECD Te Remarks: Fresh w	est Guideline 201
				NOEC (Desmodes Exposure time: 72 Remarks: Fresh w	
	dipotas	sium peroxodisulph	ate:		
	Toxicity	•	:		hus mykiss (rainbow trout)): 76.3 mg/l b h
		to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48	agna (Water flea)): 120 mg/l s h





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	Toxicity to algae/aquatic plants		:	mg/l Exposure time: 72	idokirchneriella subcapitata (microalgae)): 83.7 ne: 72 h CD Test Guideline 201		
	Ecotox	icology Assessment					
	Chronic	aquatic toxicity	:	This product has i	no known ecotoxicological effects.		
12.2	Persist	tence and degradabil	ity				
	Compo	onents:					
	pentap	otassium bis(peroxy	mor	າosulphate) bis(sເ	Ilphate):		
	Biodegi	radability	:		ods for determining the biological degradabil- ble to inorganic substances.		
	Benzer	nesulfonic acid, C10-	13-a	ılkyl derivs., sodiu	ım salts:		
	Biodegi	radability	:	Result: Readily bi Biodegradation: 8 Exposure time: 28 Method: OECD To GLP: yes	33 %		
	malic a	icid:					
	Biodegi	radability	:	Test Type: aerobi Result: Readily bi Biodegradation: 6 Exposure time: 28 Method: OECD To GLP: yes	odegradable. 57.5 %		
	sulpha	midic acid:					
	Biodeg	radability	:		ods for determining the biological degradabil- ble to inorganic substances.		
	sodium	n toluenesulphonate:					
	Biodegi	radability	:	Result: Not readily Biodegradation: (Exposure time: 28 Method: OECD Te) - 2 %		
	dipotas	ssium peroxodisulpha	ate:				
	-	radability		Result: The metho	ods for determining the biological degradabil- ble to inorganic substances.		





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12.3 Bioac	cumulative potential			
Comp	oonents:			
penta	potassium bis(perox	ymo	nosulphate) bis	sulphate):
	on coefficient: n- ol/water	:	log Pow: < 0.3 Method: OECD	Test Guideline 117
Benze	enesulfonic acid, C10)-13-a	alkyl derivs., soo	dium salts:
	on coefficient: n- ol/water	:	log Pow: 1.4 (2 Method: OECD	3 °C) Test Guideline 123
malic	acid:			
	on coefficient: n- ol/water	:	log Pow: -1.26	
sulph	amidic acid:			
	on coefficient: n- ol/water	:	log Pow: -4.34	
12.4 Mobil	lity in soil			
No da	ta available			
12.5 Resu	Its of PBT and vPvB a	asse	ssment	
<u>Produ</u>	<u>ict:</u>			
Asses	sment	:	to be either per	mixture contains no components considered sistent, bioaccumulative and toxic (PBT), or and very bioaccumulative (vPvB) at levels of
12.6 Other	adverse effects			
Produ	uct:			
	onal ecological infor-	:	unprofessional Toxic to aquation	
			Harmful to aqua	atic life with long lasting effects.
SECTION	13: Disposal cons	idera	ations	
13.1 Waste	e treatment methods			

:	The product should not be allowed to enter drains, water
	courses or the soil.
	Do not contaminate ponds, waterways or ditches with chemi-
	:





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			iner. ed waste management company. cordance with local regulations.			
Contaminated packaging		: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.				

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Hazard and Handling Notes. : Not dangerous cargo. Risk of serious damage to eyes. Irritating to skin. Keep dry. Keep away from foodstuffs, acids and alkalis.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Not applicable
International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors	:	Not applicable





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		I - Candidate List of Su n for Authorisation (Art	, ,	:	stances of	ct does not contain sub- very high concern (Regu- No 1907/2006 (REACH),
	•	tion (EC) No 1005/2009 e ozone layer	9 on substances that d	e- :	Not applica	ble
	Regula tants (re	tion (EU) 2019/1021 or ecast)	n persistent organic pol	lu- :	Not applica	ble
	for the	Regulation (EC) No 12 monitoring of trade betw untries in drug precurs	ween the Community a		Neither bar	nned nor restricted
	UK RE/ (Annex	ACH List of substances XIV)	s subject to authorisation	on :	Not applica	ble
		oort and import of haza d Consent (PIC) Regu		· :	Not applica	ble

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. Not applicable

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements

H302 H314 H315 H317 H318 H319 H334 H335	: : : : : : : : : : : : : : : : : : : :	May intensify fire; oxidizer. Harmful if swallowed. Causes severe skin burns and eye damage. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye damage. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficul- ties if inhaled. May cause respiratory irritation. Harmful to aquatic life with long lasting effects.
Full text of other abbreviation	าร	
Acute Tox. Aquatic Chronic Eye Dam. Eye Irrit.	:	Acute toxicity Long-term (chronic) aquatic hazard Serious eye damage Eye irritation





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Ox. Sol. Resp. Sens. Skin Corr. Skin Irrit. Skin Sens. STOT SE		 Oxidizing solid Respiratory se Skin corrosion Skin irritation Skin sensitisat Specific target 	nsitisation

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 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; SDS - Safety Data Sheet; SVHC - Substance of very high concern; 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

Classification of the n	nixture:	Classification procedure:
Skin Irrit. 2	H315	Based on product data or assessment
Skin Irrit. 2 Eye Dam. 1 Aquatic Chronic 3	H318	Calculation method
Aquatic Chronic 3	H412	Calculation method

The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The information given is





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