

Virkon Professional tablets

Version 1.0	Revision Date: 04/06/2021		DS Number: 3000009937	Date of last issue: - Country / Language: US / EN		
SECTION	1. IDENTIFICATION					
Produ	Product name		: Virkon Professional tablets			
Produ	ct code	:	0000000062075989			
EPA r	EPA registration number		39967-137			
	Manufacturer or supplier's Company		etails : LANXESS Corporation Product Safety & Regulatory Affairs 111 RIDC Park West Drive 15275-1112 Pittsburgh, United States of America			
Respo	onsible Department	:	+1800LANXESS			
Emerg	gency telephone	:	CHEMTREC: International: LANXESS Emer	+1 (800) 424 9300 +1 (703) 527 3887 gency Phone: +1 (866) 673 6350		
Recommended use of the c Recommended use		chen :	nical and restriction Disinfectants Cleaning agent	ons on use		

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accort 1910.1200).	rdar	nce with the OSHA Hazard Communication Standard (29 CFR
Skin irritation	:	Category 2
Serious eye damage	:	Category 1
GHS label elements		
Hazard pictograms	:	
Signal Word	:	Danger
Hazard Statements	:	Causes skin irritation. Causes serious eye damage.
Precautionary Statements	:	Prevention: Wash skin thoroughly after handling. Wear protective gloves/ eye protection/ face protection.
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Response:

IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	CAS-No.	Concentration (% w/w)
pentapotassium	70693-62-8	>= 30 - < 50
bis(peroxymonosulphate)		
bis(sulphate)		
malic acid	6915-15-7	>= 20 - < 30
sulphamidic acid	5329-14-6	>= 5 - < 10
sodium dodecylbenzenesulfonate	25155-30-0	>= 1 - < 5
potassium hydrogensulphate	7646-93-7	>= 1 - < 5
dipotassium peroxodisulphate	7727-21-1	>= 1 - < 5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

If inhaled	 Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If unconscious, place in recovery position and get medical attention immediately. Maintain open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
In case of skin contact	 In case of contact, immediately flush skin with plenty of water for at least 30 minutes. Get medical attention immediately. Wash contaminated clothing thoroughly with water before
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			Wash contaminat	ear gloves. hated clothing and shoes. ed clothing before reuse. shoes before reuse.
In ca	In case of eye contact		the upper and low Remove contact I rinsing. Continue to rinse	eyes with plenty of water, occasionally lifting
If swa	allowed	:	fortable for breath If victim is fully co Stop if the expose dangerous. Do not induce vor sonnel. If vomiting occurs does not enter the Chemical burns n Never give anythi Maintain open air	water. fresh air and keep at rest in a position com- ing. nscious, give a cupful of water. ed person feels sick as vomiting may be niting unless directed to do by medical per- , the head should be kept low so that vomit e lungs. nust be treated promptly by a physician. ng by mouth to an unconscious person.
Most	t important symptoms a	and	effects, both acut	e and delayed
S	ymptoms	:	stinging, and swe	ation with symptoms of reddening, tearing, Illing. ation with symptoms of reddening, itching,
E	Effects		Causes skin irrita Causes serious e	
Note	Notes to physician		: Treat symptomatically.	
SECTION	I 5. FIRE-FIGHTING ME	ASI	JRES	
Suita	ble extinguishing media	:	cumstances and t	measures that are appropriate to local cir- he surrounding environment. e water spray (fog), foam or dry chemical.





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fighting			ing or thermal decomposition. Water runoff from fire fighting may be corrosive.			
	Hazardous combustion prod- ucts		:	Sulfur oxides Metal oxides Carbon dioxide (CO2) Carbon monoxide Nitrogen oxides (NOx) Halogenated compounds Phosphorus oxides		
F	Further information		:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or witho suitable training.		
	•	protective equipment fighters	:	and self-contained	ld wear appropriate protective equipment d breathing apparatus (SCBA) with a full ed in positive pressure mode.	

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Ensure adequate ventilation or exhaust ventilation in the work- ing area. Put on appropriate personal protection equipment. In case of inadequate ventilation wear respiratory protection.
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	:	Move containers from spill area. Keep people away from and upwind of spill/leak. Avoid dust formation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of wastes in an approved waste disposal facility.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Do not get in eyes or mouth or on skin. Do not breathe vapors/dust. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory	





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		from a compatik use. Empty containe tions for produc Do not re-use e Workers should and smoking. Put on appropri Eating, drinking	 Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue; observe all precautions for product. Do not re-use empty containers. Workers should wash hands and face before eating, drinking 				
Cond	itions for safe storage	 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. Keep containers sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate container to avoid environmental contamination. Empty containers retain residue and can be dangerous. 					

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
dipotassium peroxodisulphate	7727-21-1	TŴA	0.1 mg/m3 (Persulphate)	ACGIH
Engineering measures :	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor 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.			or other rborne
Personal protective equipment	it			
Respiratory protection :	Although no exposure limit has been established for this product, the OSHA PEL for Particulates Not Otherwise Regu- lated (PNOR) of 15 mg/m3 - total dust, 5 mg/m3 - respirable fraction is recommended. In addition, the ACGIH recom- mends 3 mg/m3 - respirable particles and 10 mg/m3 - inhala- ble particles for Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS).			wise Regu- respirable recom- n3 - inhala-



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		trations exceed t	spirator is recommended if airborne concen- he appropriate standard/guideline. d, air-purifying particulate respirator with N-		
Hand protection Material Wearing time		: Butyl rubber - IIF : < 60 min	R		
Eye protection		, .	Safety glasses with side-shields If inhalation hazards exist, a full-face respirator may be re- quired instead.		
Skin a	and body protection	: Wear suitable pr	Wear suitable protective clothing.		
Hygiene measures		chemical produc lavatory and at th Appropriate tech contaminated clo Wash contamina	ited clothing before reusing. vash stations and safety showers are close		

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: tablet
Physical state	: solid
Color	: yellow
Odor	: odorless
Odor Threshold	: No data available
рН	: 2.5 - 3 Concentration: 10 %
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: No data available
Evaporation rate	: No data available



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Se	elf-ignition	:	No data available	9
Bu	Burning number		No data available)
	Upper explosion limit / Upper flammability limit		No data available)
	Lower explosion limit / Lower flammability limit		No data available)
Va	apor pressure	:	< 0.0001 hPa	
Re	elative density	:	No data available)
De	ensity	:	1.35 g/cm3	
So	Solubility(ies) Water solubility		65 g/l	
	Solubility in other solvents		No data available)
	Partition coefficient: n- octanol/water		No data available	
De	ecomposition temperature	:	> 122 °F / > 50 °C	0
Vi	Viscosity Viscosity, dynamic		No data available)
	Viscosity, kinematic	:	No data available)
E>	plosive properties	:	No data available)
O	Oxidizing properties		No data available)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	The product is chemically stable.
Possibility of hazardous reac- tions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	Exposure to moisture.
Incompatible materials	:	Strong bases Combustible material Acids Oxidizing agents
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		brass Copper Halogenated co Cyanides Heavy metal sa	
Hazar	dous decomposition	: Chlorine	
produ	cts	Sulfur oxides	

SECTION 11. TOXICOLOGICAL INFORMATION

The most important known symptoms and effects are described in Section 2 and/or Section 4.

Information on likely routes of exposure

Skin contact Eye contact Ingestion

Acute toxicity

Not classified based on available information.

Product:

<u>r rouuot.</u>		
Acute oral toxicity	LD50 (Rat, male and female Method: OECD Test Guidelin GLP: yes	
Acute inhalation toxicity	tion toxicity Remarks: the particle size m	ne 403 or mixture has no acute inhala- easurements of the product indi- and therefore not bioavailable by
Acute dermal toxicity	LD50 (Rat, male and female Remarks: Extrapolation acco 440/2008): > 5,000 mg/kg ording to Regulation (EC) No.
Components:		
pentapotassium bis(peroxy	osulphate) bis(sulphate):	
Acute oral toxicity	LD50 (Rat, male and female Method: OECD Test Guidelin	,
Acute inhalation toxicity	LC0 (Rat, male): > 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guidelin	ne 403



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	Assessment: The substance or mixture has no acute inhal tion toxicity Remarks: Highest producible concentration.
dermal toxicity	 LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402 Remarks: Extrapolation according to Regulation (EC) No. 440/2008
acid:	
oral toxicity	: LD50 (Rat, male and female): 3,500 mg/kg Method: OECD Test Guideline 401 GLP: no
inhalation toxicity	 LC0 (Rat, male and female): > 1.306 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Remarks: Highest producible concentration.
dermal toxicity	: LD50 (Rabbit, female): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: no
amidic acid:	
oral toxicity	: LD50 (Rat, female): 2,140 mg/kg Method: OECD Test Guideline 401 GLP: yes
dermal toxicity	 LD50 (Rat, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes Assessment: The substance or mixture has no acute derm toxicity
n dodecylbenzene	sulfonate:
oral toxicity	: LD50 (Rat): 438 mg/kg
sium hydrogensulp	hate:
oral toxicity	: LD50 (Rat): 2,340 mg/kg
ssium peroxodisul	phate:
oral toxicity	: LD50 (Rat): 700 mg/kg
inhalation toxicity	: LC0 (Rat): > 2.95 mg/l Exposure time: 4 h Test atmosphere: dust/mist Remarks: Highest producible concentration.
	04/06/2021 dermal toxicity acid: oral toxicity inhalation toxicity dermal toxicity dermal toxicity dermal toxicity dermal toxicity dermal toxicity dermal toxicity sium hydrogensulp oral toxicity sium peroxodisul oral toxicity



rsion	Revision Date: 04/06/2021		98 Number: 3000009937	Date of last issue: - Country / Language: US / EN
Acute	dermal toxicity	:	LD50 (Rabbit): >	10,000 mg/kg
_	corrosion/irritation es skin irritation.			
Produ	uct:			
Specie Metho Resul	bd	:	Rabbit OECD Test Guid Irritating to skin.	eline 404
Comp	oonents:			
penta	potassium bis(pero	xymor	nosulphate) bis(s	sulphate):
Speci	es	:	Rabbit	
Metho		:	OECD Test Guid	leline 404
Resul	t	:	Causes burns.	
malic	acid:			
Speci			Rabbit	
Metho		:	OECD Test Guid	leline 404
Resul	t	:	No skin irritation	
sulph	amidic acid:			
Speci		:	Rabbit	
Metho Resul		:	OECD Test Guid Irritating to skin.	leline 404
Resul	L	•	initaling to skin.	
sodiu	Im dodecylbenzenes	sulfona		
Asses	ssment	:	Irritating to skin.	
potas	sium hydrogensulp	hate:		
Asses	ssment	:	Causes burns.	
dipota	assium peroxodisul	phate:		
Speci	-	:	Rabbit	
Metho		:	OECD Test Guid	leline 404
Resul	t	:	Irritating to skin.	
Serio	us eye damage/eye	irritati	on	
Cause	es serious eye damag	ge.		
Produ	uct:			
Speci		:	Rabbit	
Resul	t	:	Risk of serious d	amage to eyes.





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Com	oonents:		
		wymenecylnhete) bio	(aulahata).
-		xymonosulphate) bis	(suiphate):
Speci		: Rabbit	
Resul		: OECD Test Gu	damage to eyes.
Metho	Da	: OECD Test Gu	Ideline 405
malic	acid:		
Speci	es	: Rabbit	
Resul	t	: Irritating to eyes	δ.
Metho	od	: OECD Test Gu	ideline 405
sulph	amidic acid:		
Speci		: Rabbit	
Resul		: Irritating to eyes	3.
Metho		: OECD Test Gu	ideline 405
	m dodecylbenzenes		_
Asses	ssment	: Risk of serious	damage to eyes.
dipot	assium peroxodisul	phate:	
Resul	-	: Irritating to eyes	
Resul	·	. Initiating to cyc.	
Resp	iratory or skin sens	itization	
Skin	sensitization		
	sensitization assified based on av	ailable information.	
Not cl Resp	assified based on availation	I	
Not cl Resp	assified based on av	I	
Not cl Resp Not cl <u>Produ</u>	assified based on avaint in a second se	ailable information.	
Not cl Respi Not cl <u>Produ</u> Route	assified based on avaint in a solution as a	ailable information. : Skin contact	
Not cl Resp Not cl <u>Produ</u> Route Speci	assified based on avaint in a second	ailable information. : Skin contact : Guinea pig	
Not cl Respi Not cl Produ Route Speci Metho	assified based on avaination iratory sensitization assified based on avain as of exposure es od	ailable information. : Skin contact : Guinea pig : OECD Test Gu	
Not cl Resp Not cl <u>Produ</u> Route Speci	assified based on avaination iratory sensitization assified based on avain as of exposure es od	ailable information. : Skin contact : Guinea pig : OECD Test Gu	ideline 406 ensitization on laboratory animals.
Not cl Resp Not cl Produ Route Speci Metho Resul Route	assified based on avaination iratory sensitization assified based on avaination assified based on avaination assof exposure as of exposure	ailable information. : Skin contact : Guinea pig : OECD Test Gu : Did not cause s : Inhalation	ensitization on laboratory animals.
Not cl Resp Not cl Produ Route Speci Metho Resul Route Speci	assified based on avaination iratory sensitization assified based on avaination assified based on avaination in the set of exposure es of exposure es	ailable information. : Skin contact : Guinea pig : OECD Test Gu : Did not cause s : Inhalation : Mammal - spec	ensitization on laboratory animals. ies unspecified
Not cl Resp Not cl Produ Route Speci Metho Resul Route	assified based on avaination iratory sensitization assified based on avaination assified based on avaination in the set of exposure es of exposure es	ailable information. : Skin contact : Guinea pig : OECD Test Gu : Did not cause s : Inhalation : Mammal - spec : Expert judgmer	ensitization on laboratory animals. ies unspecified nt
Not cl Resp Not cl Produ Route Speci Metho Resul Route Speci	assified based on avaination iratory sensitization assified based on avaination assified based on avaination in the set of exposure es of exposure es of exposure	ailable information. : Skin contact : Guinea pig : OECD Test Gu : Did not cause s : Inhalation : Mammal - spec : Expert judgmer	ensitization on laboratory animals. ies unspecified
Not cl Resp Not cl Produ Route Speci Metho Resul Route Speci Metho Resul	assified based on avaination iratory sensitization assified based on avaination assified based on avaination in the set of exposure es of exposure es of exposure	ailable information. : Skin contact : Guinea pig : OECD Test Gu : Did not cause s : Inhalation : Mammal - spec : Expert judgmer	ensitization on laboratory animals. ies unspecified nt
Not cl Resp Not cl Produ Route Speci Metho Resul Route Speci Metho Resul	assified based on availation iratory sensitization assified based on availation assified based on availation in the solution of exposure es od t t ponents:	ailable information. : Skin contact : Guinea pig : OECD Test Gu : Did not cause s : Inhalation : Mammal - spec : Expert judgmer	ensitization on laboratory animals. ies unspecified nt ensitization on laboratory animals.
Not cl Respi Not cl Produ Route Speci Metho Resul Route Speci Metho Resul Comp penta	assified based on availation iratory sensitization assified based on availation assified based on availation in the solution of exposure es od t t ponents:	ailable information. : Skin contact : Guinea pig : OECD Test Gu : Did not cause s : Inhalation : Mammal - spec : Expert judgmer : Did not cause s	ensitization on laboratory animals. ies unspecified nt ensitization on laboratory animals.
Not cl Respi Not cl Produ Route Speci Metho Resul Route Speci Metho Resul Comp penta	assified based on availation iratory sensitization assified based on availation assified based on availation is of exposure es od t sof exposure es od t ponents: potassium bis(pero	ailable information. : Skin contact : Guinea pig : OECD Test Gu : Did not cause s : Inhalation : Mammal - spec : Expert judgmer : Did not cause s	ensitization on laboratory animals. ies unspecified nt ensitization on laboratory animals.





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Re	esult		:	Does not cause s	skin sensitization.
Ro Sp Mo Re	alic acid: outes of e oecies ethod esult LP	-		Skin contact Guinea pig OECD Test Guid Did not cause ser yes	eline 406 nsitization on laboratory animals.
	ılphamid əsult	ic acid:	:	Did not cause se	nsitization on laboratory animals.
Ro Sp	potassiu outes of e oecies esult	m peroxodisulph exposure	ate:	Inhalation Mammal - specie	s unspecified tization by inhalation.
Sp Me	outes of e becies ethod esult	exposure	:	Skin contact Mouse OECD Test Guid May cause sensi	eline 429 tization by skin contact.
No		mutagenicity ed based on availa Its:	able	information.	
pe		ssium bis(peroxy	'moi :	Method: OECD T Result: positive GLP: yes Test system: Bac Metabolic activati	mmalian-Animal ion: with and without metabolic activation est Guideline 476
					mmalian-Human ion: with and without metabolic activation est Guideline 473

Genotoxicity in vivo : Species: Mammalian-Animal Application Route: Oral Method: OECD Test Guideline 474



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		Result: negati	ve
malic	c acid:		
Geno	toxicity in vitro	: Remarks: Not cological tests	mutagenic in a standard battery of genetic toxi- s.
sulpl	namidic acid:		
Genc	toxicity in vitro	Metabolic acti	Mammalian-Human vation: with and without metabolic activation D Test Guideline 487 ve
		Metabolic acti	Mammalian-Animal vation: with and without metabolic activation D Test Guideline 476 ve
			vation: with and without metabolic activation D Test Guideline 471
dipot	assium peroxodisulp	ohate:	
Genc	toxicity in vitro	: Remarks: Not cological tests	mutagenic in a standard battery of genetic toxi- s.
Carc	inogenicity		
Not c	lassified based on ava	ilable information.	

Not classified based on available information.

- **IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- **NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate):

Effects on fetal development	:	Remarks: No teratogenic or fetotoxic effects were found at all
		dose levels tested.

malic acid:





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Effect	ts on fetal development	:	Remarks: No k	nown significant effects or critical hazards.
	-single exposure	bla	information	
	lassified based on availa ponents:	bie	information.	
	sium hydrogensulpha	te:		
-	ssment	:	May cause resp	piratory irritation.
dipot	assium peroxodisulph	ate	:	
Asses	ssment	:	May cause resp	piratory irritation.
	-repeated exposure			
	lassified based on availa	ble	information.	
-	ated dose toxicity			
Com	oonents:			
penta	apotassium bis(peroxy	mo	nosulphate) bis	(sulphate):
Speci		:	Rat, male and f	female
LOAE		:	> 1,000 mg/kg	
	cation Route	÷	Oral	
	sure time per of exposures	÷	28 d 7 days/week	
Metho		:	OECD Test Gu	ideline 407
Rema		:	Subacute toxici	
Speci	es	:	Rat, male and f	iemale
LOAE		:	600 mg/kg	
	cation Route	÷	Oral	
	sure time	÷	90 d 7 days/week	
Metho	per of exposures	:	OECD Test Gu	ideline 408
Rema		:	Subchronic toxi	
malic	acid:			
Rema	arks	:	No known signi	ificant effects or critical hazards.
sodiu	ım dodecylbenzenesul	fon	ate:	
Speci	es	:	Rat	
NOA		:	220 mg/kg	
	cation Route	:	Oral	
Dose		:	220 mg/kg	
Rema	arks	:	Chronic toxicity	1



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	-	tion toxicity ssified based on availa	ıble	information.				
SEC	SECTION 12. ECOLOGICAL INFORMATION							
	Ecotoxicity							
	Components:							
	pentap	otassium bis(peroxy	moi	nosulphate) bis(si	ulphate):			
	Toxicity	y to fish	:	LC50 (Oncorhync Exposure time: 96 Method: OECD To GLP: yes Remarks: Fresh v	est Guideline 203			
		y to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48 Method: OECD To GLP: yes Remarks: Fresh v	est Guideline 202			
	Toxicity plants	y to algae/aquatic	:	EC50 (Pseudokiro Exposure time: 72 Method: OECD To GLP: yes Remarks: Fresh v	est Guideline 201			
				NOEC (Pseudokin mg/l Exposure time: 72 Method: OECD To GLP: yes Remarks: Fresh v	est Guideline 201			
	malic a	acid:						
		y to fish	:	LC50 (Danio reric Exposure time: 96 Method: OECD To GLP: yes Remarks: Fresh v	est Guideline 203			
		y to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48 Method: OECD To GLP: yes Remarks: Fresh v	est Guideline 202			
	Toxicity plants	/ to algae/aquatic	:	EC50 (algae): > 1 Exposure time: 72				



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		Method: OE GLP: yes Remarks: Fr	CD Test Guideline 201 esh water
		NOEC (alga Exposure tin Method: OE GLP: yes Remarks: Fr	ne: 72 h CD Test Guideline 201
sulph	amidic acid:		
	ty to fish	Exposure tin	CD Test Guideline 203
	ty to daphnia and other ic invertebrates	Exposure tin	CD Test Guideline 202
Toxici plants	ty to algae/aquatic	End point: G Exposure tin	ne: 72 h CD Test Guideline 201
		End point: G Exposure tin	ne: 72 h CD Test Guideline 201
Toxici icity)	ty to fish (Chronic tox-	Exposure tin	io rerio (zebra fish)): >= 60 mg/l ne: 34 d CD Test Guideline 210
	ity to daphnia and other ic invertebrates (Chron- city)	Exposure tin	hnia magna (Water flea)): 19 mg/l ne: 21 d CD Test Guideline 211
Toxici	ity to microorganisms	Exposure tin	espiration inhibition ne: 3 h CD Test Guideline 209



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ım dodecylbenzenesul	fon	ate:			
-	: NOEC (Oncorhynchus kisutch (coho salmon)): 3.1 mg Exposure time: 3 Days				
Toxicity to daphnia and other : aquatic invertebrates (Chron- ic toxicity)		NOEC (Daphnia magna (Water flea)): 4 mg/l Exposure time: 7 Days			
assium peroxodisulph	ate:				
ity to fish	:		nchus mykiss (rainbow trout)): 76.3 mg/l 96 h		
	:		magna (Water flea)): 120 mg/l 48 h		
Toxicity to algae/aquatic plants		EC50 (Pseudokirchneriella subcapitata (microalgae)): 83.7 mg/l Exposure time: 72 h Method: OECD Test Guideline 201			
Ecotoxicology Assessment Chronic aquatic toxicity					
		This product has no known ecotoxicological effects.			
stence and degradabili	ity				
oonents:					
potassium bis(peroxy	moi	nosulphate) bis(sulphate):		
gradability	:		hods for determining the biological degradab able to inorganic substances.		
			-		
acid:					
acid: gradability	:	aerobic Result: Readily Biodegradation: Exposure time: 2 Method: OECD GLP: yes	67.5 %		
gradability	:	Result: Readily Biodegradation: Exposure time: 2 Method: OECD	67.5 ⁻ % 28 d		
	:	Result: Readily Biodegradation: Exposure time: 2 Method: OECD GLP: yes Result: The met	67.5 ⁻ % 28 d		
gradability namidic acid:	: :	Result: Readily Biodegradation: Exposure time: 2 Method: OECD GLP: yes Result: The met ity are not applic	67.5 ⁻ % 28 d Test Guideline 301B hods for determining the biological degradab		
	04/06/2021 am dodecylbenzenesulf ity to fish (Chronic tox- ity to daphnia and other ic invertebrates (Chron- city) assium peroxodisulpha ity to daphnia and other ic invertebrates ity to algae/aquatic bxicology Assessment nic aquatic toxicity stence and degradability ponents:	04/06/202120am dodecylbenzenesulfonative to fish (Chronic tox-:ity to fish (Chronic tox-:ity to daphnia and other:ic invertebrates (Chron-:ity to fish:ity to daphnia and other:ity to algae/aquatic:ity to algae/aquatic:stic aquatic toxicity:stence and degradabilityponents:apotassium bis(peroxymore)	04/06/202120300009937Im dodecylbenzenesulfonate:ity to fish (Chronic tox- Exposure time: 3ity to daphnia and other ic invertebrates (Chron- city)assium peroxodisulphate:ity to fish:LC50 (Oncorhy Exposure time: 3ity to daphnia and other ic invertebrates:ity to daphnia and other ic invertebrates::		





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			ity are not appli	icable to inorganic substances.
Bioad	cumulative potentia	al		
Com	oonents:			
penta	apotassium bis(pero	xymo	nosulphate) bis	(sulphate):
	ion coefficient: n- ol/water	:	log Pow: < 0.3 Method: OECD	Test Guideline 117
malic	acid:			
	ion coefficient: n- ol/water	:	log Pow: -1.26	
sulph	namidic acid:			
	ion coefficient: n- ol/water	:	log Pow: -4.34	
sodiu	Im dodecylbenzene	sulfon	ate:	
Bioac	cumulation	:	Bioconcentratio	on factor (BCF): 220
	ion coefficient: n- ol/water	:	log Pow: 0.45	
Mobi	lity in soil			
No da	ata available			
Othe	r adverse effects			
No da	ata available			

RCRA - Resource Conserva- tion and Recovery Authoriza- tion Act	: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)
Waste from residues	 The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Empty containers retain product residue; observe all precau- tions for product. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
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Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

Domestic regulation

49 CFR

43 01 10		
UN/ID/NA number	:	UN 3077
Proper shipping name	:	Environmentally hazardous substance, solid, n.o.s. (SODIUM DODECYLBENZENE SULFONATE)
Class	:	9
Packing group	:	
Labels	:	9
	:	
ERG Code	:	171
RQ	:	21,166.71 lb
Marine pollutant	:	no
When in individual containers	of I	ess than the Product RQ, this material ships as non-regulated.
Hazard and Handling Notae		

Hazard and Handling Notes.

Risk of serious damage to eyes, Keep separated from foodstuffs

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.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
sodium dodecylbenzenesulfonate	25155-30-0	1000	21166



Virkon Professional tablets

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SAF	A 302 Extremely Haza	rdous Substances Th	reshold Planning Quantity				
This	material does not conta	in any components wit	h a section 302 EHS TPQ.				
SAF	RA 311/312 Hazards		: Skin corrosion or irritation Serious eye damage or eye irritation				
SAF	RA 313	known CAS num	: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.				
US	State Regulations						
Mas	sachusetts Right To K	now					
	sodium dodecylber	nzenesulfonate	25155-30-0	1 - 5			
Pen	nsylvania Right To Kno	ow					
	pentapotassium bis bis(sulphate)	s(peroxymonosulphate) 70693-62-8	30 - 50			
	malic acid		6915-15-7	20 - 30			
	sodium hydrogenc	arbonate (Solution)	144-55-8	> 1			
	sulphamidic acid		5329-14-6	5 - 10			
	Polyphosphoric ac		68915-31-1	> 1			
	sodium dodecylber		25155-30-0	1 - 5			
	potassium hydroge		7646-93-7	1 - 5			
	dipotassium perox	oaisuiphate	7727-21-1	1-5			
	sodium sulphate		7757-82-6	< 1			

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

TSCA inventory

TSCA

: This product is regulated under the United States Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

FIFRA information

EPA registration number : 39967-137

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:





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Signal Word		: DANGE	R		
Hazard Statements		burns.	: Powder is corrosive. Causes irreversible eye damage and skir burns. Harmful if swallowed or absorbed through skin. Corro- sive statement does not refer to 1% in-use solution.		
Hazard Statements		Active I Potas Sodiu Other	Registered Composition: ngredients: sium peroxymonosulfate (CAS# 10058-23-8) 21.41% n chloride (CAS# 7647-14-5) 1.5% Ingredients 77.09% 100%"		

SECTION 16. OTHER INFORMATION



Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA	:	8-hour, time-weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for



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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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development: OPPTS - Office of Chemical Safety and Pollution Prevention: PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act: REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity: SADT - Self-Accelerating Decomposition Temperature: SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Verv Persistent and Verv Bioaccumulative

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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 designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered to be a guidance for processing and does not contain any 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. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.