

SPINNAKER

Version 8.0

Revision Date: 12.10.2022

SDS Number: S00040338009 This version replaces all previous versions.

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

1.1 Product identifier

Trade name	:	SPINNAKER
Design code	:	A8545H
Product Registration Number	:	MAPP 18855

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

Use of the	:	Herbicide
Substance/Mixture		
Recommended restrictions	:	professional use
on use		professional use

1.3 Details of the supplier of the safety data sheet

Company	:	ADAMA Agricultural Solutions UK Ltd Third Floor East, 1410 Arlington Business Park, Theale, Reading, RG7 4SA
Telephone	:	+44(0)1635 860555
Telefax	:	+44 (0)1635 861555
E-mail address of person responsible for the SDS	:	ukenquiries@adama.com

1.4 Emergency telephone number

Emergency telephone	:	National Chemical Emergency Centre (UK)
number		+44 (0) 1865 407333 (24 hours)

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)

Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Aspiration hazard, Category 1	H304: May be fatal if swallowed and enters
	airways.
Short-term (acute) aquatic hazard,	H400: Very toxic to aquatic life.

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



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H410: Very toxic to aquatic life with long lasting

Category 1 Long-term (chronic) aquatic hazard, Category 1

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)

effects.

Lazard	nictogramo
riazaiu	piciograms

Signal word

Danger

Hazard statements

- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention:

2

- P261 Avoid breathing mist or vapours.
- P264 Wash skin thoroughly after handling.
- P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

- P331 Do NOT induce vomiting.
- P391 Collect spillage.

Disposal:

P501 Dispose of contents/container to a licensed hazardouswaste disposal contractor or collection site except for empty triple rinsed clean containers which can be disposed of as nonhazardous waste.

Hazardous components which must be listed on the label: prosulfocarb (ISO) Hydrocarbons, C9, Aromatics

Additional Labelling

- EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
- EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

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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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
prosulfocarb (ISO)	52888-80-9 401-730-6 006-072-00-X	Acute Tox. 4; H302 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 1	>= 70 - < 90
Hydrocarbons, C9, Aromatics	128601-23-0 265-199-0	Flam. Liq. 3; H226 STOT SE 3; H335 (Respiratory system) STOT SE 3; H336 (Central nervous system) Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 10 - < 20
benzenesulfonic acid, C10-13-alkyl derivs., calcium salts	1335202-81-7	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 3 - < 10
2-ethylhexan-1-ol	104-76-7 203-234-3	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system)	>= 1 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Have the product container, label or Safety Data Sheet with

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		you when calling the emergency number, a poison control center or physician, or going for treatment.
lf inha	aled	 Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or poison control centre immediately.
In cas	e of skin contact	 Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
In cas	e of eye contact	 Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
lf swa	llowed	 If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.
4.2 Most i	mportant symptom	s and effects, both acute and delayed
Symp	toms	: Aspiration may cause pulmonary oedema and pneumonitis.
4.3 Indicat	tion of any immedia	te medical attention and special treatment needed
Treatr	nent	 There is no specific antidote available. Treat symptomatically. Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.
SECTION	I 5: Firefighting m	easures

5.1 Extinguishing media

Suitable extinguishing media	:	Extinguishing media - small fires Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Extinguishing media - large fires Alcohol-resistant foam
Unsuitable extinguishing media	:	Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards during	:	As the product contains combustible organic components, fire
firefighting		will produce dense black smoke containing hazardous
		products of combustion (see section 10).

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		Exposure to decomposition products may be a ha health. Flash back possible over considerable distance.		mposition products may be a hazard to le over considerable distance.
5.3 Advice	e for firefighters			
Speci for fire	al protective equipment efighters	:	Wear full protectiv apparatus.	e clothing and self-contained breathing
Further information		:	Do not allow run-c courses. Cool closed conta	ff from fire fighting to enter drains or water iners exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	 Refer to protective measures listed in sections 7 and 8. Keep people away from and upwind of spill/leak. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Remove all sources of ignition. Pay attention to flashback.

6.2 Environmental precautions

Environmental precautions	ronmental precautions :	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform
		If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Clean contaminated surface thoroughly.
		Clean with detergents. Avoid solvents.
		Retain and dispose of contaminated wash water.

6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Avoid contact with skin and eyes.
	V	When using do not eat, drink or smoke.
		Use only in an area containing flame proof equipment.
		Take precautionary measures against static discharges.

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		For perso	nal protection see section 8.	
7.2 Cond	itions for safe storage	, including any	incompatibilities	
Requirements for storage areas and containers		: Keep cont ventilated from comb sprinklers. feedingstu	Keep containers tightly closed in a dry, cool and well- ventilated place. Keep out of the reach of children. Keep away from combustible material. Keep in an area equipped with sprinklers. Keep away from food, drink and animal feedingstuffs. No smoking.	
7.3 Spec	ific end use(s)			
Specific use(s) :		: For prope approval o	For proper and safe use of this product, please refer to the approval conditions laid down on the product label.	

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form	Control parameters	Basis
		of exposure)		
prosulfocarb (ISO)	52888-80-9	TWA	4 mg/m3	Syngenta
Hydrocarbons, C9,	128601-23-	TWA	19 ppm	Supplier
Aromatics	0		100 mg/m3	
2-ethylhexan-1-ol	104-76-7	TWA	1 ppm	GB EH40
			5.4 mg/m3	
		TWA	1 ppm	2017/164/EU
			5.4 mg/m3	
	Further information: Indicative			

Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
Hydrocarbons, C9, Aromatics	Workers	Inhalation	Long-term systemic effects	150 mg/m3
	Workers	Dermal	Long-term systemic effects	25 mg/kg
	Consumers	Inhalation	Long-term systemic effects	32 mg/m3
	Consumers	Dermal	Long-term systemic effects	11 mg/kg
	Consumers	Oral	Long-term systemic effects	11 mg/kg
benzenesulfonic acid, C10-13-alkyl derivs., calcium salts	Consumers	Oral	Long-term systemic effects	89 mg/kg
	Consumers	Dermal	Long-term systemic effects	85 mg/kg
	Workers	Dermal	Long-term systemic effects	1.7 mg/kg
2-ethylhexan-1-ol	Consumers	Ingestion	Long-term systemic	1.1 mg/kg

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		effects	
Workers	Dermal	Long-term systemic effects	23 mg/kg
Consumers	Dermal	Long-term systemic effects	11.4 mg/kg
Workers	Inhalation	Acute local effects	106.4 mg/m3
Consumers	Inhalation	Acute local effects	53.2 mg/m3
Workers	Inhalation	Long-term systemic effects	53.2 mg/m3
Consumers	Inhalation	Long-term systemic	2.3 mg/m3

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
benzenesulfonic acid, C10-13-	Fresh water	0.023 mg/l
alkyl derivs., calcium salts		_
	Marine water	0.002 mg/l
	Fresh water sediment	0.174 mg/kg
	Marine sediment	0.017 mg/kg
	Soil	0.62 mg/kg
2-ethylhexan-1-ol	Fresh water	0.017 mg/l
	Marine water	0.0017 mg/l
	Intermittent use/release	0.17 mg/l
	Fresh water sediment	28 mg/kg
	Marine sediment	0.028 mg/kg
	Sewage treatment plant	10 mg/kg
	Soil	0.047 mg/kg

8.2 Exposure controls

Engineering measures

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards. Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

:	Tightly fitting safety goggles Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.
:	Nitrile rubber > 480 min 0.5 mm
:	Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.
	:

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Skin and body protection		 Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things on the materia the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemic breakthrough. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and t 				
		Remove and v Wear as appro Impervious clo	vash contaminated clothing before re-use. priate: thing			
Respira	atory protection	: No personal re required. When workers limit they must	are facing concentrations above the exposure use appropriate certified respirators.			
Protect	ive measures	: The use of tec over the use o When selecting appropriate pro	hnical measures should always have priority f personal protective equipment. g personal protective equipment, seek ofessional advice.			

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance Colour Odour Odour Threshold	:	clear pale yellow aromatic No data available
рН	:	6 Concentration: 1 % w/v
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	73 °C Method: Pensky-Martens closed cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available

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	Lower explosion limit / Lower flammability limit	:	No data available	9	
	Vapour pressure	:	No data available	9	
	Relative vapour density	:	No data available	9	
Density		:	1,012 g/cm3 (25	°C)	
	Solubility(ies) Water solubility Solubility in other solvents	:	No data available No data available	9	
	Partition coefficient: n-	:	No data available	9	
	Auto-ignition temperature	:	380 °C		
	Decomposition temperature		No data available	9	
	Viscosity Viscosity, kinematic	:	No data available		
	Explosive properties	:	Not explosive		
	Oxidizing properties	:	The substance o	r mixture is not classified as oxidizing.	
9.2	Other information				
	Particle size	:	No data available	9	

SECTION 10: Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions						
Hazardous reactions	:	No dangerous reaction known under conditions of normal use.				
10.4 Conditions to avoid						

Conditions to avoid :

: No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

Hazardous decomposition : No hazardous decomposition products are known. products

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SECTION 11: Toxicological information

1.1 Information on toxicological effects					
Information on likely routes of exposure	:	Ingestion Inhalation Skin contact Eye contact			
Acute toxicity					
Product:					
Acute oral toxicity	:	LD50 (Rat, male and female): > 2,000 mg/kg Assessment: The substance or mixture has no acute oral toxicity Remarks: Based on data from similar materials			
Acute inhalation toxicity	:	Acute toxicity estimate: > 20 mg/l			
		Exposure time: 4 h Test atmosphere: vapour			
		Method: Calculation method			
Acute dermal toxicity	:	LD50 (Rat, male and female): > 4,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity Remarks: Based on data from similar materials			
Components:					
prosulfocarb (ISO):					
Acute oral toxicity	:	LD50 (Rat, male): 1,820 mg/kg			
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 4.72 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity			
Acute dermal toxicity	:	LD50 (Rabbit, male and female): > 2,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity			
Hydrocarbons, C9, Aromatic	s:				
Acute oral toxicity	:	LD50 (Rat, female): 3,492 mg/kg			
benzenesulfonic acid, C10-1	3-a	Ikyl derivs., calcium salts:			
Acute oral toxicity	:	LD50 (Rat): 4,445 mg/kg			
Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg Assessment: The substance or mixture has no acute dermal			



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		toxicity			
2-eth	ylhexan-1-ol:				
Acut	e oral toxicity	: LD50 (Rat): 2,047 mg/kg		
Acut	e inhalation toxicity	: LC50 (Rat Exposure Test atmo Assessme short term): > 0.89 - 5.3 mg/l time: 4 h sphere: dust/mist nt: The component/mixture is moderately toxic after inhalation.		
Skin	corrosion/irritation				
Prod	luct:				
Spec	cies	: Rabbit			
Resu Rem	ilt arks	: Irritating to : Based on	o skin. data from similar materials		
Com	ponents:				
pros	ulfocarb (ISO):				
Spec Resu	sies Ilt	: Rabbit : No skin irr	itation		
Hvdr	ocarbons. C9. Aroma	tics:			
Resu	ılt	: Repeated	exposure may cause skin dryness or cracking.		
Spec Resu	sies Ilt	: Rabbit : Mild skin i	ritation		
benz	enesulfonic acid, C1)-13-alkyl derivs	., calcium salts:		
Spec Resu	sies Ilt	: Rabbit : Irritating to	skin.		
2-eth	ylhexan-1-ol:				
Spec	cies	: Rabbit			
Resu	ılt	: Irritating to	skin.		
Serie	ous eye damage/eye i	rritation			
Prod	luct:				
Spec	cies	: Rabbit			
Resu	ılt arks	: Irritation to	eyes, reversing within 21 days		
Relli	ains	. Daseu Uli			



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	Compo	onents:			
	prosul	focarb (ISO):			
	Specie: Result	S	:	Rabbit No eye irritatio	1
	benzer	nesulfonic acid, C1	0-13-a	lkyl derivs., ca	cium salts:
	Specie: Result	S	:	Rabbit Risk of serious	damage to eyes.
	2-ethyl	hexan-1-ol:			
	Specie: Result	S	:	Rabbit Irritation to eye	s, reversing within 21 days
	Respir	atory or skin sensi	itisatio	on	
	Produc	<u>:t:</u>			
	Test Ty Species	rpe	:	Buehler Test	
	Result	5	:	May cause ser	sitisation by skin contact.
	Remarl	<s< td=""><td>:</td><td>Based on data</td><td>from similar materials</td></s<>	:	Based on data	from similar materials
	Compo	onents:			
	prosul	focarb (ISO):			
	Test Ty Specie	rpe	:	Local lymph no	de assay (LLNA)
	Result		:	The product is	a skin sensitiser, sub-category 1B.
	Germ o	cell mutagenicity			
	Compo	onents:			
	prosul	focarb (ISO):			
	Germ o Assess	ell mutagenicity- ment	:	Animal testing	did not show any mutagenic effects.
	Carcin	ogenicity			
	<u>Compo</u>	onents:			
	prosul	focarb (ISO):			
	Carcino Assess	ogenicity - ment	:	No evidence of	carcinogenicity in animal studies.
	Reproc	ductive toxicity			
	Compo	onents:			
	prosul	focarb (ISO):			
	Reprod	luctive toxicity -	:	Weight of evide	ence does not support classification for



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	Assess	ment		reproductive to	xicity			
	STOT -	single exposure						
	Compo	onents:						
	Hydroc	arbons, C9, Arom	atics:					
Assessment :		The substance toxicant, single The substance toxicant, single irritation.	The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.					
	2-ethyl	hexan-1-ol:						
	Assess	ment	:	The substance toxicant, single irritation.	or mixture is classified as specific target organ exposure, category 3 with respiratory tract			
	STOT -	repeated exposu	re					
	Compo	onents:						
	prosulf	ocarb (ISO):						
	Assess	ment	:	The substance organ toxicant	or mixture is not classified as specific target repeated exposure.			
	Aspira	tion toxicity						
	Compo	onents:						
	Hydrocarbons, C9, Aromatics: May be fatal if swallowed and enters airways.							
SE		12: Ecological in	forma	tion				
12.1	l Toxicit	у						
	Produc	<u>:t:</u>						

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 3 mg/l Exposure time: 96 h Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2.2 mg/l Exposure time: 48 h Remarks: Based on data from similar materials
Toxicity to algae/aquatic plants	:	ErC50 (Raphidocelis subcapitata (freshwater green alga)): 0.18 mg/l Exposure time: 96 h Remarks: Based on data from similar materials



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			NOEC (Raphidocelis subcapitata (freshwater green alga)): 0.010 mg/l End point: Growth rate Exposure time: 96 h Remarks: Based on data from similar materials			
<u>c</u>	Components:					
р	orosulfocarb (ISO):					
T	oxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 0.84 mg/l Exposure time: 96 h			
T a	oxicity to daphnia and other quatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.51 mg/l Exposure time: 48 h			
Т р	oxicity to algae/aquatic lants	:	ErC50 (Raphidocelis subcapitata (freshwater green alga)): 0.120 mg/l Exposure time: 72 h			
			NOEC (Raphidocelis subcapitata (freshwater green alga)): 0.009 mg/l End point: Growth rate Exposure time: 72 h			
			ErC50 (Desmodesmus subspicatus (green algae)): 0.180 mg/l Exposure time: 72 h			
			EC10 (Desmodesmus subspicatus (green algae)): 0.082 mg/l End point: Growth rate Exposure time: 72 h			
N to	/-Factor (Acute aquatic oxicity)	:	1			
T to	oxicity to fish (Chronic oxicity)	:	NOEC: 0.31 mg/l Exposure time: 21 d Species: Oncorhynchus mykiss (rainbow trout)			
T a ('	oxicity to daphnia and other quatic invertebrates Chronic toxicity)	:	NOEC: 0.045 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)			
F	lydrocarbons, C9, Aromatic	s:				
Т	oxicity to fish	:	LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 96 h			
T a	oxicity to daphnia and other quatic invertebrates	:	EL50 (Daphnia magna (Water flea)): 3.2 mg/l Exposure time: 48 h			
Т р	oxicity to algae/aquatic	:	ErC50 (Raphidocelis subcapitata (freshwater green alga)): 2.9 mg/l			



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				Exposure time: 72	h		
				NOELR (Raphidoo 1.0 mg/l End point: Growth Exposure time: 72	celis subcapitata (freshwater green alga)): rate h		
	Toxicity toxicity)	to fish (Chronic	:	NOELR: 1.228 mg Exposure time: 28 Species: Oncorhy	/l d nchus mykiss (rainbow trout)		
	Toxicity aquatic (Chronic	to daphnia and other invertebrates c toxicity)	:	NOELR: 2.144 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)			
	Ecotox	icology Assessment					
	Chronic	aquatic toxicity	:	Toxic to aquatic lif	e with long lasting effects.		
	benzen	esulfonic acid, C10-1	3-a	lkyl derivs., calciu	m salts:		
	Toxicity	to fish	:	LC50 (Fish): > 1 - Exposure time: 96	< 10 mg/l h		
	Toxicity aquatic	to daphnia and other invertebrates	:	EC50 (Daphnia magna (Water flea)): 2.9 mg/l Exposure time: 48 h Remarks: Based on data from similar materials			
	Toxicity plants	to algae/aquatic	:	 ErC50 (Raphidocelis subcapitata (freshwater green alga)): mg/l Exposure time: 96 h Remarks: Based on data from similar materials 			
				NOEC (Raphidoce mg/l Exposure time: 96 Remarks: Based o	elis subcapitata (freshwater green alga)): 0.5 h on data from similar materials		
	Toxicity toxicity)	to fish (Chronic	:	NOEC: 0.23 mg/l Exposure time: 72 Species: Oncorhy Remarks: Based o	d nchus mykiss (rainbow trout) n data from similar materials		
	Toxicity aquatic (Chronic	to daphnia and other invertebrates c toxicity)	:	NOEC: 1.18 mg/l Exposure time: 21 Species: Daphnia Remarks: Based o	d magna (Water flea) on data from similar materials		
	2-ethyll	hexan-1-ol:					
	Toxicity	to fish	:	LC50 (Leuciscus i Exposure time: 96	dus (Golden orfe)): 17.1 mg/l h		
	Toxicity	to daphnia and other	:	EC50 (Daphnia m	agna (Water flea)): 39 mg/l		



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	aquatic	invertebrates		Exposure time: 4	8 h	
	Toxicity plants	to algae/aquatic	:	EC50 (Desmode Exposure time: 7	smus subspicatus (green algae)): 16.6 mg/l ′2 h	
12.2	2 Persist	ence and degradab	oility			
	<u>Compo</u>	onents:				
	prosulf	ocarb (ISO):				
	Biodegr	adability	:	Result: Not readi	ly biodegradable.	
	Stability	in water	:	Degradation half Remarks: Persis	life: 159 - 279 d tent in water.	
	Hydroc	arbons, C9, Aroma	tics:			
	Biodegr	adability	:	Result: Readily b	viodegradable.	
honzonosulfonia acid. C10.12 alkul dariya . calajum salts:						
	Biodegr	adability	: :	Result: Readily b	biodegradable.	
	2-ethyl Biodegr	hexan-1-ol: radability	:	Result: Readily b	viodegradable.	
12.3	Bioacc	umulative potential	I			
	Compo	onents:				
	prosulf	ocarb (ISO):				
	Bioaccu	umulation	:	Remarks: Bioaco	cumulates	
12.4	l Mobilit	y in soil				
	<u>Compo</u>	nents:				
	prosulf	ocarb (ISO):				
	Distribu	tion among	:	Remarks: Slightly	y mobile in soils	
	Stability in soil :		:S :	Dissipation time: 35 d Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.		
12.5	5 Result	s of PBT and vPvB	asses	ssment		
	<u>Produ</u> c	: <u>t:</u>				
	Assess	ment	:	This substance/r to be either persivery persistent a 0.1% or higher.	nixture contains no components considered stent, bioaccumulative and toxic (PBT), or nd very bioaccumulative (vPvB) at levels of	

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



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Compo	onents:		
prosul	focarb (ISO):		
Assess	sment	: This substance bioaccumulatin considered to b (vPvB).	is not considered to be persistent, g and toxic (PBT) This substance is not e very persistent and very bioaccumulating
12.6 Other	adverse effects		
Produc	<u>ct:</u>		
Endocr potenti	rine disrupting al	: The substance, considered to h to REACH Artic (EU) 2017/2100 levels of 0.1% o	mixture does not contain components ave endocrine disrupting properties according le 57(f) or Commission Delegated regulation or Commission Regulation (EU) 2018/605 at or higher.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.
Contaminated packaging	:	Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

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

14.2 UN proper shipping name

: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROSULFOCARB AND SOLVENT NAPHTHA)

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



SF	PINNAK	(ER			
Ver 8.0	sion Re 12	evision Date: .10.2022	SE SC	0S Number: 0040338009	This version replaces all previous versions.
	RID		:	ENVIRONMENTA N.O.S. (PROSULFOCAR	ALLY HAZARDOUS SUBSTANCE, LIQUID, RB AND SOLVENT NAPHTHA)
	IMDG		:	ENVIRONMENTA N.O.S. (PROSULFOCAR	ALLY HAZARDOUS SUBSTANCE, LIQUID,
	ΙΑΤΑ		:	Environmentally h (PROSULFOCAR	nazardous substance, liquid, n.o.s. RB_AND_SOLVENT NAPHTHA)
14.3	3 Transport	hazard class(es)			
	ADR		:	9	
	RID		:	9	
	IMDG		:	9	
	ΙΑΤΑ		:	9	
14.4	4 Packing g	Iroup			
	ADR Packing gr Classificati Hazard Ide Labels Tunnel res RID Packing gr Classificati Hazard Ide Labels IMDG Packing gr Labels EmS Code IATA (Car Packing in aircraft) Packing in	oup ion Code entification Number triction code oup ion Code entification Number oup e go) struction (cargo		III M6 90 9 (-) III M6 90 9 9 III 9 F-A, S-F 964	
	Packing in Packing gr Labels	struction (LQ) oup	:	Y964 III Miscellaneous	
14	IATA (Pas Packing in: (passenge Packing in: Packing gr Labels	senger) struction r aircraft) struction (LQ) oup ental bazards	:	964 Y964 III Miscellaneous	
14.3		unai nazai us			

ADR

Environmentally hazardous : yes

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



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RID Enviro	onmentally hazardous	: yes	
IMDG Marin	i e pollutant	: yes	
IATA Enviro	(Passenger) onmentally hazardous	: yes	
IATA Enviro	(Cargo) onmentally hazardous	: yes	

14.6 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.

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

UK REACH List of restrictions (Annex 17)	:	Conditions of restriction for the following entries should be considered: Number on list 3
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation	:	Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
UK REACH List of substances subject to authorisation (Annex XIV)	:	Not applicable
GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation	:	Not applicable
Control of Major Accident Hazards Regulations E1 2015 (COMAH)	ΕŊ	VIRONMENTAL HAZARDS

Other regulations:

15.2 Chemical safety assessment

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

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



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SECTION 16: Other information

Full text of H-Statements

H226	: Flammable liquid and vapour.
H302	: Harmful if swallowed.
H304	: May be fatal if swallowed and enters airways.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H335	: May cause respiratory irritation.
H336	: May cause drowsiness or dizziness.
H400	: Very toxic to aquatic life.
H411	: Toxic to aquatic life with long lasting effects.
H412	: Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Aquatic Acute : Aquatic Chronic		Acute toxicity Short-term (acute) aquatic hazard Long-term (chronic) aquatic hazard
Asp. Tox.		Aspiration hazard
Eye Dam. :		Serious eye damage
Eye Irrit. :		Eye irritation
Flam. Liq. :		Flammable liquids
Skin Irrit. :		Skin irritation
Skin Sens. :		Skin sensitisation
STOT SE :		Specific target organ toxicity - single exposure
2017/164/EU :		Europe. Commission Directive 2017/164/EU establishing a
		fourth list of indicative occupational exposure limit values
GB EH40 :		UK. EH40 WEL - Workplace Exposure Limits
2017/164/EU / TWA :		Limit Value - eight hours
GB EH40 / TWA :	:	Long-term exposure limit (8-hour TWA reference period)

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



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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

Further information

Classification of the n	nixture:	Classification procedure:
Skin Irrit. 2	H315	Based on product data or assessment
Eye Irrit. 2	H319	Based on product data or assessment
Skin Sens. 1	H317	Based on product data or assessment
Asp. Tox. 1	H304	Calculation method
Aquatic Acute 1	H400	Based on product data or assessment
Aquatic Chronic 1	H410	Based on product data or assessment

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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