

# SAFETY DATA SHEET

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



## DEFY

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 : DEFY  
Design code : A8545H  
Product Registration Number : MAPP 16203  
Unique Formula Identifier (UFI) : RDC3-T007-900M-ECF2

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

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

#### 1.3 Details of the supplier of the safety data sheet

Company : Syngenta UK Limited  
CPC4, Capital Park  
Fulbourn, Cambridge CB21 5XE  
United Kingdom  
Telephone : +44 (0) 1223 883400  
Telefax : +44 (0) 1223 882195  
E-mail address of person responsible for the SDS : customer.services@syngenta.com

#### 1.4 Emergency telephone number

Emergency telephone number : +44 1484 538444

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### 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.

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Category 1  
Long-term (chronic) aquatic hazard,  
Category 1      H410: Very toxic to aquatic life with long lasting effects.

### 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 :  
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:**  
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 hazardous-waste disposal contractor or collection site except for empty triple rinsed clean containers which can be disposed of as non-hazardous 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.

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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.

- If inhaled : 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 case 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 case 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.
- If swallowed : 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 important symptoms and effects, both acute and delayed

Symptoms : Aspiration may cause pulmonary oedema and pneumonitis.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : There is no specific antidote available.  
Treat symptomatically.  
Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.

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## SECTION 5: Firefighting measures

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

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Exposure to decomposition products may be a hazard to health.

Flash back possible over considerable distance.

### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

Further information : Do not allow run-off from fire fighting to enter drains or water courses.  
Cool closed containers exposed to fire with water spray.

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## 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 : 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 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.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.  
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 personal protection see section 8.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : 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 Specific end use(s)

Specific use(s) : 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 of exposure)	Control parameters	Basis
pro sulfocarb (ISO)	52888-80-9	TWA	4 mg/m <sup>3</sup>	Syngenta
Hydrocarbons, C <sub>9</sub> , Aromatics	128601-23-0	TWA	19 ppm 100 mg/m <sup>3</sup>	Supplier
2-ethylhexan-1-ol	104-76-7	TWA	1 ppm 5.4 mg/m <sup>3</sup>	GB EH40
		TWA	1 ppm 5.4 mg/m <sup>3</sup>	2017/164/EU
Further information: Indicative				

#### Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
Hydrocarbons, C <sub>9</sub> , Aromatics	Workers	Inhalation	Long-term systemic effects	150 mg/m <sup>3</sup>
	Workers	Dermal	Long-term systemic effects	25 mg/kg
	Consumers	Inhalation	Long-term systemic effects	32 mg/m <sup>3</sup>
	Consumers	Dermal	Long-term systemic effects	11 mg/kg
	Consumers	Oral	Long-term systemic effects	11 mg/kg
	benzenesulfonic acid, C <sub>10</sub> -13-alkyl derivs., calcium salts	Consumers	Oral	Long-term systemic effects
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 effects	2.3 mg/m3

### Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
benzenesulfonic acid, C10-13-alkyl derivs., calcium salts	Fresh water	0.023 mg/l
	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

Eye/face protection : Tightly fitting safety goggles  
Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.

Hand protection

Material : Nitrile rubber  
Break through time : > 480 min  
Glove thickness : 0.5 mm

Remarks : 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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- 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 material, 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 chemical breakthrough.
- Skin and body protection** : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.  
Remove and wash contaminated clothing before re-use.  
Wear as appropriate:  
Impervious clothing
- Respiratory protection** : No personal respiratory protective equipment normally required.  
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Protective measures** : The use of technical measures should always have priority over the use of personal protective equipment.  
When selecting personal protective equipment, seek appropriate professional advice.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance : clear  
Colour : pale yellow  
Odour : aromatic  
Odour Threshold : No data available
- pH : 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
- Vapour pressure : No data available
- Relative vapour density : No data available
- Density : 1,012 g/cm<sup>3</sup> (25 °C)
- Solubility(ies)
  - Water solubility : No data available
  - Solubility in other solvents : No data available
- Partition coefficient: n-octanol/water : No data available
- Auto-ignition temperature : 380 °C
- Decomposition temperature : No data available
- Viscosity
  - Viscosity, kinematic : No data available
- Explosive properties : Not explosive
- Oxidizing properties : The substance or mixture is not classified as oxidizing.

### 9.2 Other information

- Particle size : No data available

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## 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 products : No hazardous decomposition products are known.

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### SECTION 11: Toxicological information

#### 11.1 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, Aromatics:**

Acute oral toxicity : LD50 (Rat, female): 3,492 mg/kg

##### **benzenesulfonic acid, C10-13-alkyl 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-ethylhexan-1-ol:

Acute oral toxicity : LD50 (Rat): 2,047 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 0.89 - 5.3 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The component/mixture is moderately toxic after short term inhalation.

### Skin corrosion/irritation

#### Product:

Species : Rabbit  
Result : Irritating to skin.  
Remarks : Based on data from similar materials

#### Components:

##### pro sulfocarb (ISO):

Species : Rabbit  
Result : No skin irritation

##### Hydrocarbons, C9, Aromatics:

Result : Repeated exposure may cause skin dryness or cracking.

Species : Rabbit  
Result : Mild skin irritation

##### benzenesulfonic acid, C10-13-alkyl derivs., calcium salts:

Species : Rabbit  
Result : Irritating to skin.

### 2-ethylhexan-1-ol:

Species : Rabbit  
Result : Irritating to skin.

### Serious eye damage/eye irritation

#### Product:

Species : Rabbit  
Result : Irritation to eyes, reversing within 21 days  
Remarks : Based on data from similar materials

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### Components:

#### **prosulfocarb (ISO):**

Species : Rabbit  
Result : No eye irritation

#### **benzenesulfonic acid, C10-13-alkyl derivs., calcium salts:**

Species : Rabbit  
Result : Risk of serious damage to eyes.

#### **2-ethylhexan-1-ol:**

Species : Rabbit  
Result : Irritation to eyes, reversing within 21 days

### **Respiratory or skin sensitisation**

#### Product:

Test Type : Buehler Test  
Species : Guinea pig  
Result : May cause sensitisation by skin contact.  
Remarks : Based on data from similar materials

### Components:

#### **prosulfocarb (ISO):**

Test Type : Local lymph node assay (LLNA)  
Species : Mouse  
Result : The product is a skin sensitizer, sub-category 1B.

### **Germ cell mutagenicity**

#### Components:

#### **prosulfocarb (ISO):**

Germ cell mutagenicity-  
Assessment : Animal testing did not show any mutagenic effects.

### **Carcinogenicity**

#### Components:

#### **prosulfocarb (ISO):**

Carcinogenicity -  
Assessment : No evidence of carcinogenicity in animal studies.

### **Reproductive toxicity**

#### Components:

#### **prosulfocarb (ISO):**

Reproductive toxicity - : Weight of evidence does not support classification for

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Assessment      reproductive toxicity

### STOT - single exposure

#### Components:

##### **Hydrocarbons, C9, Aromatics:**

Assessment      :    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-ethylhexan-1-ol:**

Assessment      :    The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

### STOT - repeated exposure

#### Components:

##### **prosulfocarb (ISO):**

Assessment      :    The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### Aspiration toxicity

#### Components:

##### **Hydrocarbons, C9, Aromatics:**

May be fatal if swallowed and enters airways.

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## SECTION 12: Ecological information

### 12.1 Toxicity

#### Product:

- 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

### Components:

#### **pro sulfocarb (ISO):**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.84 mg/l  
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.51 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : 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
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to fish (Chronic toxicity) : NOEC: 0.31 mg/l  
Exposure time: 21 d  
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.045 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

#### **Hydrocarbons, C9, Aromatics:**

- Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l  
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 3.2 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 2.9 mg/l

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Exposure time: 72 h

NOELR (Raphidocelis subcapitata (freshwater green alga)):  
1.0 mg/l

End point: Growth rate  
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOELR: 1.228 mg/l  
Exposure time: 28 d  
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 2.144 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

### Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

### benzenesulfonic acid, C10-13-alkyl derivs., calcium salts:

Toxicity to fish : LC50 (Fish): > 1 - < 10 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.9 mg/l  
Exposure time: 48 h  
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 29 mg/l  
Exposure time: 96 h  
Remarks: Based on data from similar materials

NOEC (Raphidocelis subcapitata (freshwater green alga)): 0.5 mg/l  
Exposure time: 96 h  
Remarks: Based on data from similar materials

Toxicity to fish (Chronic toxicity) : NOEC: 0.23 mg/l  
Exposure time: 72 d  
Species: Oncorhynchus mykiss (rainbow trout)  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1.18 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Remarks: Based on data from similar materials

### 2-ethylhexan-1-ol:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 17.1 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 39 mg/l

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aquatic invertebrates      Exposure time: 48 h

Toxicity to algae/aquatic plants      :      EC50 (Desmodesmus subspicatus (green algae)): 16.6 mg/l  
Exposure time: 72 h

### 12.2 Persistence and degradability

#### Components:

##### **prosulfocarb (ISO):**

Biodegradability      :      Result: Not readily biodegradable.

Stability in water      :      Degradation half life: 159 - 279 d  
Remarks: Persistent in water.

##### **Hydrocarbons, C9, Aromatics:**

Biodegradability      :      Result: Readily biodegradable.

##### **benzenesulfonic acid, C10-13-alkyl derivs., calcium salts:**

Biodegradability      :      Result: Readily biodegradable.

##### **2-ethylhexan-1-ol:**

Biodegradability      :      Result: Readily biodegradable.

### 12.3 Bioaccumulative potential

#### Components:

##### **prosulfocarb (ISO):**

Bioaccumulation      :      Remarks: Bioaccumulates

### 12.4 Mobility in soil

#### Components:

##### **prosulfocarb (ISO):**

Distribution among      :      Remarks: Slightly mobile in soils  
environmental compartments

Stability in soil      :      Dissipation time: 35 d  
Percentage dissipation: 50 % (DT50)  
Remarks: Product is not persistent.

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment      :      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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### Components:

#### **prosulfocarb (ISO):**

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

### 12.6 Other adverse effects

#### Product:

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

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## 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.

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## SECTION 14: Transport information

### 14.1 UN number

ADR : UN 3082  
RID : UN 3082  
IMDG : UN 3082  
IATA : UN 3082

### 14.2 UN proper shipping name

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

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

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

**IATA** : Environmentally hazardous substance, liquid, n.o.s.  
(PROSULFOCARB AND SOLVENT NAPHTHA)

### 14.3 Transport hazard class(es)

**ADR** : 9

**RID** : 9

**IMDG** : 9

**IATA** : 9

### 14.4 Packing group

**ADR**  
Packing group : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9  
Tunnel restriction code : (-)

**RID**  
Packing group : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9

**IMDG**  
Packing group : III  
Labels : 9  
EmS Code : F-A, S-F

**IATA (Cargo)**  
Packing instruction (cargo aircraft) : 964  
Packing instruction (LQ) : Y964  
Packing group : III  
Labels : Miscellaneous

**IATA (Passenger)**  
Packing instruction (passenger aircraft) : 964  
Packing instruction (LQ) : Y964  
Packing group : III  
Labels : Miscellaneous

### 14.5 Environmental hazards

**ADR**  
Environmentally hazardous : yes

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### RID

Environmentally hazardous : yes

### IMDG

Marine pollutant : yes

### IATA (Passenger)

Environmentally hazardous : yes

### IATA (Cargo)

Environmentally 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.

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## 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 2015 (COMAH)	E1	ENVIRONMENTAL 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.

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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.	: Acute toxicity
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: 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 mixture:

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
Asp. Tox. 1	H304
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

#### Classification procedure:

Based on product data or assessment
Based on product data or assessment
Based on product data or assessment
Calculation method
Based on product data or assessment
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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