

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 05-Jul-2018

Revision date 08-Jan-2025

Revision Number 3

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

1.1. Product identifier

Product Code(s) 11209
Safety data sheet number 11209
Product Name DOWFAX 8390 SURFACTANT
Pure substance/mixture Mixture

Contains BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT; BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT; 2-METHYL-2H-ISOTHIAZOLIN-3-ONE

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

Recommended use Formulation or re-packing: Formulation & (re)packing of substances and mixtures.
Coatings
Cleaning agent
Use in process chemicals
surfactant
Industrial use
Professional use
Consumer use

Uses advised against Processing aid for manufacture of pharmaceutical ingredients.

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com
Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitisation	Category 1 - (H317)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

2.2. Label elements

Contains BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT; BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT; 2-METHYL-2H-ISOTHIAZOLIN-3-ONE

**Signal word**

Danger

Hazard statements

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

P261 - Avoid breathing mist/vapours/spray

P273 - Avoid release to the environment

P280 - Wear protective gloves and eye/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P391 - Collect spillage

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

2.3. Other hazards

In case of spills, beware of slippery floors and surfaces.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
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				amended)			
BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXOXY)-, DISODIUM SALT 65143-89-7	> 15.0 - <= 35.0 %	639-514-0	-	Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	1	1
BENZENESULFONIC ACID, OXYBIS(HEXADECYL-), DISODIUM SALT 70191-76-3	>= 5.0 - <= 10.0 %	-	-	Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	1	-
SODIUM SULPHATE 7757-82-6	<= 1.5 %	231-820-9	-	Not Classified	-	-	-
2-METHYL-2H-ISOTHIAZOLIN-3-ONE 2682-20-4	>= 0.0025 - < 0.025 %	220-239-6 (613-326-00-9)	-	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 2 (H330) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH071)	Skin Sens. 1A :: C>=0.0015%	10	1

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK REACH Article 59)

SECTION 4: First aid measures**4.1. Description of first aid measures**

General advice	First aid personnel should wear appropriate protective equipment during any rescue. Use personal protection recommended in Section 8.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Get medical attention if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if symptoms occur. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.
Ingestion	Rinse mouth thoroughly with water. Do NOT induce vomiting. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	May cause an allergic skin reaction.
Eyes	Causes serious eye damage. May cause permanent damage if eye is not immediately

irrigated. Causes eye burns.

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

Note to doctors	May cause sensitisation in susceptible persons. Treat symptomatically. Chemical eye burns may require extended irrigation. Chemical burns must be treated promptly by a physician. Because rapid absorption may occur through the lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	When heated and in case of fire, toxic vapours/gases may be formed. This material will not burn until the water has evaporated. Residue can burn.
Hazardous combustion products	Carbon oxides. Oxides of sulphur.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with skin, eyes and inhalation of vapours. Evacuate personnel to safe areas. No action shall be taken involving any personal risk or without suitable training. Keep people away from and upwind of spill/leak. In case of spills, beware of slippery floors and surfaces.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Absorb with earth, sand or other non-combustible material and transfer to containers for

later disposal. Do not use water to clean up. Pick up and transfer to properly labelled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with skin, eyes and inhalation of vapours. Do not swallow. Wash skin thoroughly after handling. Keep container closed when not in use.

General hygiene considerations Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Avoid concentrated oxidizing acids.

7.3. Specific end use(s)

Specific use(s)
See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT 65143-89-7		25 mg/kg bw/day [4] [6]	8.8 mg/m ³ [4] [6]
BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT 70191-76-3		25 mg/kg bw/day [4] [6]	8.8 mg/m ³ [4] [6]
SODIUM SULPHATE			20 mg/m ³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
7757-82-6			20 mg/m ³ [5] [6]
2-METHYL-2H-ISOTHIAZOLIN-3-ONE 2682-20-4			0.021 mg/m ³ [5] [6] 0.043 mg/m ³ [5] [7]

[4]	Systemic health effects.
[5]	Local health effects.
[6]	Long term.
[7]	Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT 65143-89-7	0.5 mg/kg bw/day [4] [6]	5 mg/kg bw/day [4] [6]	0.9 mg/m ³ [4] [6]
BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT 70191-76-3	0.5 mg/kg bw/day [4] [6]	5 mg/kg bw/day [4] [6]	0.9 mg/m ³ [4] [6]
SODIUM SULPHATE 7757-82-6			12 mg/m ³ [4] [6] 12 mg/m ³ [5] [6]
2-METHYL-2H-ISOTHIAZOLIN-3-ONE 2682-20-4	0.027 mg/kg bw/day [4] [6] 0.053 mg/kg bw/day [4] [7]		0.021 mg/m ³ [5] [6] 0.043 mg/m ³ [5] [7]

[4]	Systemic health effects.
[5]	Local health effects.
[6]	Long term.
[7]	Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
BENZENESULFONIC ACID, HEXADECYL(SULFOPHE NOXY)-, DISODIUM SALT 65143-89-7	0.0042 mg/l	0.0042 mg/l	0.00042 mg/l		
BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT 70191-76-3	0.042 mg/l	0.042 mg/l	0.0042 mg/l		
SODIUM SULPHATE 7757-82-6	11.09 mg/L	17.66 mg/L	1.109 mg/L		
2-METHYL-2H-ISOTHIAZ OLIN-3-ONE 2682-20-4	3.39 µg/L	3.39 µg/L	3.39 µg/L	3.39 µg/L	

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
BENZENESULFONIC	26 mg/kg sediment	2.6 mg/kg sediment	2.84 mg/l	5.19 mg/kg soil dw	

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
ACID, HEXADECYL(SULFOPHENOX)-, DISODIUM SALT 65143-89-7	dw	dw			
BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT 70191-76-3	26 mg/kg sediment dw	2.6 mg/kg sediment dw	2.84 mg/l	5.19 mg/kg soil dw	
SODIUM SULPHATE 7757-82-6	40.2 mg/kg sediment dw	4.02 mg/kg sediment dw	800 mg/L	1.54 mg/kg soil dw	800 mg/l
2-METHYL-2H-ISOTHIAZOLIN-3-ONE 2682-20-4			0.23 mg/L	0.0471 mg/kg soil dw	

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection Wear suitable gloves. Gloves must conform to standard EN 374.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
	Wear protective Neoprene™ gloves	> 0.35 mm	> 240 minutes
	Nitrile/butadiene rubber ("nitrile" or "NBR").	> 0.35 mm	> 240 minutes
	Polyvinyl chloride (PVC)	> 0.35 mm	> 240 minutes
	Polyvinyl alcohol (PVA)		

Skin and body protection Wear appropriate clothing to prevent reasonably probable skin contact.

Respiratory protection Use appropriate respiratory protection.
Particulate filter, type P2. Particulates filter conforming to EN 143.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance Liquid
Colour yellow To brown
Odour Odourless. To. Mild.
Odour threshold No information available

Property	Values	Remarks • Method
Melting point / freezing point	-3 - 0.9 °C	Calculation method.

Initial boiling point and boiling range	100 °C	@ 760 mmHg. Read-across.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		Flame extinguished; none to boiling.
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH	8 - 10.5	solution (5 %).
pH (as aqueous solution)		No information available.
Kinematic viscosity	10 cSt	@ 40 °C. Calculation method.
Dynamic viscosity		No information available.
Water solubility	Miscible with water	
Solubility(ies)		No information available.
Partition coefficient	log Pow: <1.82	OECD 117.
Vapour pressure	17.8 mmHg	@ 20 °C. Read-across.
Relative density	1.03 - 1.13	Read-across.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		Not determined.
Particle characteristics		Not applicable. liquid.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerisation Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Conditions to avoid Active ingredient decomposes at elevated temperatures.

10.5. Incompatible materials

Incompatible materials Avoid concentrated oxidizing acids.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Oxides of sulphur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation	Inhalation of vapours in high concentration may cause irritation of respiratory system.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.
Skin contact	May cause an allergic skin reaction. Brief contact is essentially non-irritating to skin. May cause more severe response on covered skin (under clothing, gloves).
Ingestion	May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 Oral LD50 > 5000 mg/kg
Dermal LD50 Dermal LD50 > 2000 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOX Y)-, DISODIUM SALT	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
SODIUM SULPHATE	> 2000 mg/kg (Rat)	> 2000 mg/kg	> 2.4 mg/L (Rat) 4 h
2-METHYL-2H-ISOTHIAZOLIN-3-ONE	183 - 235 mg/kg (Rat)	= 242 mg/kg (Rabbit)	= 0.11 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Brief contact is essentially non-irritating to skin. May cause more severe response if skin is abraded (scratched or cut).

BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOX Y)-, DISODIUM SALT (65143-89-7)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Brief contact is essentially non-irritating to skin. May cause more severe response if

					skin is abraded (scratched or cut).
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BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT (70191-76-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Brief contact is essentially non-irritating to skin. May cause more severe response if skin is abraded (scratched or cut).

SODIUM SULPHATE (7757-82-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Prolonged exposure not likely to cause significant skin irritation. May cause more severe response if skin is abraded (scratched or cut).

2-METHYL-2H-ISOTHIAZOLIN-3-ONE (2682-20-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes severe burns Symptoms may include pain, severe local redness and tissue damage.

Serious eye damage/eye irritation Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.

BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT (65143-89-7)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes serious eye damage May cause permanent damage if eye is not immediately irrigated. Causes eye burns

BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT (70191-76-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes serious eye damage May cause permanent damage if eye is not immediately irrigated. Causes eye burns

SODIUM SULPHATE (7757-82-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause

					temporary eye irritation Corneal injury is unlikely
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2-METHYL-2H-ISOTHIAZOLIN-3-ONE (2682-20-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes serious eye damage May cause permanent damage if eye is not immediately irrigated. Causes eye burns

Respiratory or skin sensitisation May cause an allergic skin reaction.

BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT (65143-89-7)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser

BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT (70191-76-3)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser

SODIUM SULPHATE (7757-82-6)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser

2-METHYL-2H-ISOTHIAZOLIN-3-ONE (2682-20-4)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	May cause an allergic skin reaction

Germ cell mutagenicity Not mutagenic.

Product Information		
Method	Species	Results
	in vitro	Negative
		Negative Did not show mutagenic effects in animal experiments

Component Information

BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT (65143-89-7)

Method	Species	Results
	in vitro	Negative
		Negative Did not show mutagenic effects in animal experiments

BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT (70191-76-3)

Method	Species	Results
	in vitro	Negative
		Negative Did not show mutagenic effects in animal experiments

SODIUM SULPHATE (7757-82-6)

Method	Species	Results
	in vitro	Negative

2-METHYL-2H-ISOTHIAZOLIN-3-ONE (2682-20-4)

Method	Species	Results
		Did not show mutagenic effects in animal experiments

Carcinogenicity Did not cause cancer in laboratory animals.

Component Information

BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT (65143-89-7)

Method	Species	Results
		Did not cause cancer in laboratory animals.

BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT (70191-76-3)

Method	Species	Results
		Did not cause cancer in laboratory animals.

SODIUM SULPHATE (7757-82-6)

Method	Species	Results
		Did not cause cancer in laboratory animals.

2-METHYL-2H-ISOTHIAZOLIN-3-ONE (2682-20-4)

Method	Species	Results
		Did not cause cancer in laboratory animals.

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.

BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT (65143-89-7)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT (70191-76-3)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

SODIUM SULPHATE (7757-82-6)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

2-METHYL-2H-ISOTHIAZOLIN-3-ONE (2682-20-4)

Method	Species	Results
		For similar material(s): In animal studies, did not interfere with reproduction

STOT - single exposure No information available.

SODIUM SULPHATE (7757-82-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Evaluation of available data suggests that this material is not an STOT-SE toxicant

2-METHYL-2H-ISOTHIAZOLIN-3-ONE (2682-20-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Corrosive Upper respiratory tract irritation or corrosivity may be expected.

STOT - repeated exposure In animals, effects have been reported on the following organs: Kidneys. Lungs.

Component Information

BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT (65143-89-7)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					In animals, effects have been reported on the following organs: Kidney Lungs

BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT (70191-76-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					In animals, effects have been reported on the following organs: Kidney Lungs

SODIUM SULPHATE (7757-82-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, a STOT-RE classification is not warranted.

2-METHYL-2H-ISOTHIAZOLIN-3-ONE (2682-20-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, a STOT-RE classification is not warranted.

Aspiration hazard Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Oncorhynchus mykiss (rainbow trout)	LC50	0.42 mg/L	96 hours	
	Daphnia magna	EC50	13.9 mg/L	48 hours	

2-METHYL-2H-ISOTHIAZOLIN-3-ONE (2682-20-4)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Oncorhynchus mykiss (rainbow trout)	LC50	4.77 mg/L	96 hours	
	Daphnia magna	LC50	0.93 - 1.9 mg/L	48 hours	
	Skeletonema costatum	ErC50	0.0695 mg/L	24 hours	
	Skeletonema costatum	EC10	0.024 mg/L	24 hours	
Chronic aquatic toxicity	Pimephales promelas	NOEC	2.1 mg/L	33 days	
Chronic aquatic toxicity	Daphnia magna	NOEC	0.04 mg/L	21 days	

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
SODIUM SULPHATE	-	LC50: 13500 - 14500mg/L (96h, Pimephales promelas) LC50: >6800mg/L (96h, Pimephales promelas) LC50: 3040 - 4380mg/L (96h, Lepomis macrochirus) LC50: =13500mg/L (96h, Lepomis macrochirus)	-	EC50: =2564mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability Material is not readily biodegradable according to OECD/EEC guidelines. Material is biodegradable according to SDA Semi-Continuous Activated Sludge (SCAS) confirming test for anionic surfactants. Material has inherent, primary biodegradability according to OECD test (s) guidelines (reaches > 20% biodegradation in OECD test(s)). Protocols for ready and inherent biodegradability are not suitable for measuring the biodegradability of this product.

Method	Exposure time	Value	Results
OECD Test No. 302B: Inherent Biodegradability: Zahn-Wellens/ EVPA Test or Equivalent.	28 days	Biodegradation < 60 %	
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D) or Equivalent.	28 days	Biodegradation < 60 %	

2-METHYL-2H-ISOTHIAZOLIN-3-ONE (2682-20-4)

Method	Exposure time	Value	Results

	48 days	Biodegradation 98 %	Readily biodegradable
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12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
2-METHYL-2H-ISOTHIAZOLIN-3-ONE	-0.75

12.4. Mobility in soil

Mobility in soil Miscible with water.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT	The substance is not PBT / vPvB
SODIUM SULPHATE	The substance is not PBT / vPvB PBT assessment does not apply
2-METHYL-2H-ISOTHIAZOLIN-3-ONE	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information**IATA**

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT, BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	A97, A158, A197
ERG Code	9L

IMDG

14.1 UN number or ID number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT, BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT)

14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 969
EmS-No	F-A, S-F
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT, BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 375, 601
Classification code	M6

ADR

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (BENZENESULFONIC ACID, HEXADECYL(SULFOPHENOXY)-, DISODIUM SALT, BENZENESULFONIC ACID, OXYBIS(HEXADECYL-, DISODIUM SALT)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 601, 375
Classification code	M6
Tunnel restriction code	(-)

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Authorisations and/or restrictions on use:**

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).
This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Dangerous substance category per COMAH Regulations 2015 (as amended)

E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Chemical name	The Biocidal Products Regulations 2001 (as amended)
2-METHYL-2H-ISOTHIAZOLIN-3-ONE - 2682-20-4	Product-type 6: Preservatives for products during storage Product-type 11: Preservatives for liquid-cooling and processing systems Product-type 12: Slimicides Product-type 13: Working or cutting fluid preservatives

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECI	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No Chemical Safety Assessment has been carried out for this substance/mixture

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

EUH071 - Corrosive to the respiratory tract
H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H330 - Fatal if inhaled
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

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Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Prepared By Lisa Bland

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This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet