

SAFETY DATA SHEET

Fomtec AFFF 3%

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

1.1. Product identifier

Trade name

Fomtec AFFF 3%

Product no.

10-3006-01

Unique formula identifier (UFI)

7GV1-KT18-S0J6-4R9K

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

Relevant identified uses of the substance or mixture

Appliance protection

Restricted to professional users.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Dafo Fomtec AB

Box 683

SE-13526 Tyresö

Sweden

+46 8 506 405 00

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www.fomtec.com

Contact person

CHR

E-mail

info@fomtec.com

Revision

17/11/2023

SDS Version

7.0

Date of previous version

06/11/2023 (6.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

NCEC CareChem24: +44 1273 289451

Additional Emergency Phone Number in section 16

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. Classification of the substance or mixture

Eye Irrit. 2; H319, Causes serious eye irritation.

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)



Signal word

Warning

Hazard statement(s)

Causes serious eye irritation. (H319)

Harmful to aquatic life with long lasting effects. (H412)

Precautionary statement(s)

General

-

Prevention

Wash hands thoroughly after handling. (P264)

Avoid release to the environment. (P273)

Wear eye protection/protective gloves/protective clothing. (P280)

Response

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

If eye irritation persists: Get medical advice/attention. (P337+P313)

Storage

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Disposal

Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances

None known.

Additional labelling

UFI: 7GV1-KT18-S0J6-4R9K

2.3. Other hazards

▼ Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	CAS No.: 112-34-5	5-10%	Eye Irrit. 2, H319	[1], [3]
	EC No.: 203-961-6			
	UK-REACH: 01-2119475104-44-0006			
	Index No.: 603-096-00-8			
Sodium decyl sulphate	CAS No.: 142-87-0	1-3%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 (SCL: 20.00 %) Aquatic Chronic 3, H412	
	EC No.: 205-568-5			
	UK-REACH: UK-20-1299061068-0-0000			

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

	Index No.:			
Blend of Fluorinated substances C6(PFAS)	CAS No.: 00-00-0 EC No.: UK-REACH: Index No.:	<1%		
2-methylpentane-2,4-diol	CAS No.: 107-41-5 EC No.: 203-489-0 UK-REACH: Index No.: 603-053-00-3	<1%	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d	
C6 fluorotelomer-based surfactant	CAS No.: 00-00-0 EC No.: UK-REACH: Index No.:	<0,3%	Acute Tox. 4, H302 Eye Dam. 1, H318 Repr. 1B, H360FD STOT RE 2, H373 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	
ethanediol	CAS No.: 107-21-1 EC No.: 203-473-3 UK-REACH: 01-2119456816-28-XXXX Index No.: 603-027-00-1	<0.25%	Acute Tox. 4, H302 STOT RE 2, H373 (Oral)	[1]
methanol	CAS No.: 67-56-1 EC No.: 200-659-6 UK-REACH: Index No.: 603-001-00-X	<0.05%	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 STOT SE 2, H371 (SCL: 3.00 %)	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.
Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

The product is not flammable

5.2. Special hazards arising from the substance or mixture

None

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

Dry, cool and well ventilated (< 55 °C)

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether

Long term exposure limit (8 hours) (ppm): 10

Long term exposure limit (8 hours) (mg/m³): 67.5

Short term exposure limit (15 minutes) (ppm): 15

Short term exposure limit (15 minutes) (mg/m³): 101.2

propane-1,2-diol

Long term exposure limit (8 hours) (ppm): 150(total)

Long term exposure limit (8 hours) (mg/m³): 474(total)/10(particulates)

ammonium chloride

Long term exposure limit (8 hours) (mg/m³): 10

Short term exposure limit (15 minutes) (mg/m³): 20

2-methylpentane-2,4-diol

Long term exposure limit (8 hours) (ppm): 25

Long term exposure limit (8 hours) (mg/m³): 123

Short term exposure limit (15 minutes) (ppm): 25

Short term exposure limit (15 minutes) (mg/m³): 123

ethanediol

Long term exposure limit (8 hours) (ppm): 20(vapour)

Long term exposure limit (8 hours) (mg/m³): 10(particulate)/52(vapour)

Short term exposure limit (15 minutes) (ppm): 40 (vapour)

Short term exposure limit (15 minutes) (mg/m³): 104 (vapour)

Annotations:

Sk = Can be absorbed through the skin and lead to systemic toxicity.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	50 mg/kg
Long term – Systemic effects - Workers	Dermal	83mg/kg
Long term – Local effects - Workers	Inhalation	67.5 mg/m ³
Long term – Systemic effects - Workers	Inhalation	68 mg/m ³

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Long term – Systemic effects - Workers	Inhalation	10 ppm
Short term – Local effects - General population	Inhalation	60.7 mg/m ³
Short term – Local effects - Workers	Inhalation	101,2 mg/m ³
Short term – Local effects - Workers	Inhalation	101.2 mg/m ³
Long term – Systemic effects - General population	Oral	5 mg/kg
Long term – Systemic effects - General population	Oral	6.25 mg/kg bw/day

2-methylpentane-2,4-diol

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	22.5 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	63 mg/kg bw/day
Long term – Local effects - General population	Inhalation	25 mg/m ³
Long term – Local effects - Workers	Inhalation	49 mg/m ³
Long term – Systemic effects - General population	Inhalation	7.83 mg/m ³
Long term – Systemic effects - Workers	Inhalation	44.43 mg/m ³
Short term – Local effects - General population	Inhalation	49 mg/m ³
Short term – Local effects - Workers	Inhalation	98 mg/m ³

ammonium chloride

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	55.2 mg/kg /day
Long term – Systemic effects - General population	Dermal	55.2 mg/kg bw/day

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Long term – Systemic effects - Workers	Dermal	128,9 mg/kg
Long term – Systemic effects - Workers	Dermal	128.9 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	9.4 mg/m ³
Long term – Systemic effects - General population	Inhalation	9.4 mg/m ³
Long term – Systemic effects - Workers	Inhalation	43,97mg/m ³
Long term – Systemic effects - Workers	Inhalation	33.5 mg/m ³
Long term – Systemic effects - General population	Oral	55.2 mg/m ³
Long term – Systemic effects - General population	Oral	11.4 mg/kg bw/day
Short term – Systemic effects - General population	Oral	55.2 mg/kg bw/day

ethanediol

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	53 mg/kg
Long term – Systemic effects - General population	Dermal	53 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	106 mg/kg
Long term – Systemic effects - Workers	Dermal	106 mg/kg bw/day
Long term – Local effects - General population	Inhalation	7 mg/m ³
Long term – Local effects - General population	Inhalation	7 mg/m ³
Long term – Local effects - Workers	Inhalation	35 mg/m ³
Long term – Local effects - Workers	Inhalation	35 mg/m ³

propane-1,2-diol

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	10 mg/m ³
Long term – Local effects - General population	Inhalation	10 mg/m ³
Long term – Local effects - Workers	Inhalation	10 mg /m ³
Long term – Local effects - Workers	Inhalation	10 mg/m ³
Long term – Systemic effects - General population	Inhalation	50 mg/m ³
Long term – Systemic effects - General population	Inhalation	50 mg/m ³
Long term – Systemic effects - Workers	Inhalation	168 mg/m ³
Long term – Systemic effects - Workers	Inhalation	168 mg/m ³

Sodium decyl sulphate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	2440 mg/kg
Long term – Systemic effects - General population	Dermal	2440 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	4060 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	4060 mg/kg
Long term – Systemic effects - General population	Inhalation	85 mg/m ³
Long term – Systemic effects - General population	Inhalation	85 mg/m ³
Long term – Systemic effects - Workers	Inhalation	285 mg/m ³
Short term – Systemic effects - Workers	Inhalation	285 mg/m ³
Long term – Systemic effects - General population	Oral	24 mg/kg

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Long term – Systemic effects - General population	Oral	24 mg/kg bw/day
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PNEC

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1.1 mg/L
Freshwater		1.1 mg/L
Freshwater sediment		4.4 mg/kg
Freshwater sediment		4.4 mg/kg
Intermittent release (freshwater)		11 mg/L
Marine water		0,11 mg/L
Marine water		110 µg/L
Marine water sediment		0,44 mg/ L
Marine water sediment		440 µg/kg
Predators		56 mg/kg
Soil		0.32 mg/kg
Soil		320 µg/kg

2-methylpentane-2,4-diol

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		0.429 mg/l
Freshwater		0,429 mg/L
Freshwater sediment		1.79 mg/ kg
Freshwater sediment		1.59 mg/kg
Marine water		0.0429 mg/l
Marine water		0,043 mg/L
Marine water sediment		0.179 mg/kg
Marine water sediment		0,159 mg/kg
Sewage treatment plant		20 mg/l
Sewage treatment plant		20 mg/L
Soil		0.11 mg/kg
Soil		0,066 mg/kgbw

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

ammonium chloride

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		0,25 mg/l
Freshwater		0,025 mg /l
Freshwater		250-1200 µg/L
Freshwater sediment		0,9 mg/kg
Intermittent release (freshwater)		430-1200 µg/L
Marine water		25-11200 µg/L
Marine water sediment		0,09 mg /kg
Sewage treatment plant		13.1 mg/l
Sewage treatment plant		16.2 mg/L
Soil		50.7 mg/kg
Soil		163-50700 µg/kg

ethanediol

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		10 mg/L
Freshwater		10 mg/L
Freshwater sediment		37 mg/kg
Freshwater sediment		37 mg/kg
Intermittent release (freshwater)		10 mg/L
Intermittent release (marine water)		10 mg/L
Marine water		1 mg/L
Marine water		1 mg/L
Marine water sediment		3.7 mg/kg
Marine water sediment		3.7 mg/kg
Sewage treatment plant		199.5 mg/L
Soil		1.53 mg/kg
Soil		1.53 mg/kg

propane-1,2-diol

Route of exposure:	Duration of Exposure:	PNEC:
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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Freshwater	260 mg/l
Freshwater	260 mg/L
Freshwater sediment	572 mg/kg
Freshwater sediment	572 mg/kg
Intermittent release	183 mg/l
Intermittent release (freshwater)	183 mg/L
Marine water	26 mg/l
Marine water	26 mg/L
Marine water sediment	57.2 mg/kg
Marine water sediment	57.2 mg/kg
Sewage treatment plant	2000 mg/l
Sewage treatment plant	20 g/L
Soil	50 mg/ kg
Soil	50 mg/kg

Sodium decyl sulphate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		0,095 mg/l
Freshwater		95 µg/L
Freshwater sediment		1,5 mg/kg
Freshwater sediment		1.5 mg/kg
Intermittent release		0,086mg/l
Intermittent release (freshwater)		86 µg/L
Marine water		0,0095 mg/l
Marine water		9.5 µg/L
Marine water sediment		0,15 mg/kg
Marine water sediment		150 µg/kg
Sewage treatment plant		1.35 mg/L
Soil		0,2445 mg/kg
Soil		244.5 µg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment


Generally

Use only UKCA marked protective equipment.


Respiratory Equipment

No specific requirements


Skin protection

Work situation	Recommended	Type/Category	Standards	
	Dedicated work clothing should be worn.	-	-	

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
	Vinyl/PVC	0.6	-	-	

Eye protection

Work situation	Type	Standards	
	Wear safety glasses with side shields.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Pale yellow

Odour / Odour threshold

Characteristic

pH

6.5-8.5

Density (g/cm³)

~1,015

Kinematic viscosity

<15 mPa.s (20 °C)

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

-5

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C)

Testing not relevant or not possible due to the nature of the product.

Vapour pressure

Testing not relevant or not possible due to the nature of the product.

Relative vapour density

Testing not relevant or not possible due to the nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Testing not relevant or not possible due to the nature of the product.

Flammability (°C)

Testing not relevant or not possible due to the nature of the product.

Auto-ignition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

Solubility

Solubility in water

Completely soluble

n-octanol/water coefficient

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

Other physical and chemical parameters

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law Acute toxicity

Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Species:	Mouse
Route of exposure:	Oral
Test:	LD50
Result:	2410.00 mg/kg
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	29.00 ppm
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	2764.00 mg/kg
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	5660.00 mg/kg
Product/substance	propane-1,2-diol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	22000.00 mg/kg
Product/substance	propane-1,2-diol
Species:	Rabbit
Route of exposure:	Inhalation
Test:	LC50
Result:	317042.00 mg/m ³
Product/substance	Sodium decyl sulphate
Species:	Rat

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Route of exposure:	Oral
Test:	LD50
Result:	1200.00 mg/kg
Product/substance	Sodium decyl sulphate
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	2000.00 mg/kg
Product/substance	ammonium chloride
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1410.00 mg/kg
Product/substance	ammonium chloride
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	2000.00 mg/kg
Product/substance	2-methylpentane-2,4-diol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	2000 mg/kgbw
Product/substance	2-methylpentane-2,4-diol
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	8560.00 mg/kg
Product/substance	2-methylpentane-2,4-diol
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	> 8000 mg/kg
Product/substance	C6 fluorotelomer-based surfactant
Species:	Rat

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Route of exposure:	Inhalation
Test:	LC50
Result:	0,16 mg/L
Product/substance	C6 fluorotelomer-based surfactant
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kg
Product/substance	C6 fluorotelomer-based surfactant
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	300 mg/kg
Product/substance	ethanediol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	5840.00 mg/kg
Product/substance	ethanediol
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	9530.00 mg/kg
Product/substance	ethanediol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	7712.00 mg/kg
Product/substance	ethanediol
Species:	Mouse
Route of exposure:	Dermal
Test:	LD50
Result:	3500.00 mg/kg

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	1300.00 mg/L
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	100.00 mg/L
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Species:	Algae
Duration:	96 hours
Test:	EC50
Result:	100.00 mg/L
Product/substance	propane-1,2-diol

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	40613.00 mg/L
Product/substance	propane-1,2-diol
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	24200.00 mg/L
Product/substance	propane-1,2-diol
Species:	Daphnia
Duration:	48 hours
Test:	LC50
Result:	34400.00 mg/L
Product/substance	Sodium decyl sulphate
Species:	Fish
Duration:	48 hours
Test:	LC50
Result:	13.00 mg/L
Product/substance	Sodium decyl sulphate
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	8.64 mg/L
Product/substance	Sodium decyl sulphate
Species:	Daphnia
Duration:	24 hours
Test:	EC50
Result:	>100 mg/L
Product/substance	ammonium chloride
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	43.00 mg/L
Product/substance	ammonium chloride

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	136.60 mg/L
Product/substance	2-methylpentane-2,4-diol
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	8510.00 mg/L
Product/substance	2-methylpentane-2,4-diol
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	5,41 mg/L
Product/substance	2-methylpentane-2,4-diol
Species:	Algae
Duration:	72 hours
Test:	IC50
Result:	429.00 mg/L
Product/substance	C6 fluorotelomer-based surfactant
Test method:	OECD 201
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	0,62 mg/L
Product/substance	C6 fluorotelomer-based surfactant
Test method:	OECD 202
Species:	Crustacean, Daphnia magna
Duration:	48 hours
Test:	EC50
Result:	7,41 mg/L
Product/substance	C6 fluorotelomer-based surfactant
Test method:	OECD 203
Species:	Fish, Danio rerio
Duration:	96 hours

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Test:	LC50
Result:	>100 mg/L
Product/substance	C6 fluorotelomer-based surfactant
Species:	Crustacean, Daphnia magna
Duration:	48 hours
Test:	LC50
Result:	4 mg/L
Product/substance	C6 fluorotelomer-based surfactant
Species:	Crustacean, Daphnia magna
Duration:	48 hours
Test:	EC50
Result:	7,41 mg/L
Product/substance	ethanediol
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	72860.00 mg/L
Product/substance	ethanediol
Species:	Algae
Duration:	96 hours
Test:	EC50
Result:	6500.00 mg/L
Product/substance	ethanediol
Species:	Daphnia
Duration:	No data available.
Test:	NOEC
Result:	8590.00 mg/L

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Biodegradable:	Yes
Test method:	OECD 301 C
Result:	80 %
Product/substance	propane-1,2-diol
Biodegradable:	Yes

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Result:	95,8 %
Product/substance	Sodium decyl sulphate
Biodegradable:	Yes
Test method:	OECD 301 D
Result:	80 %
Product/substance	2-methylpentane-2,4-diol
Biodegradable:	Yes
Test method:	OECD 301 F
Result:	81 %
Product/substance	ethanediol
Biodegradable:	Yes
Result:	90 %

12.3. Bioaccumulative potential

Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Potential bioaccumulation:	No
LogPow:	No data available.
BCF:	No data available.
Product/substance	propane-1,2-diol
Potential bioaccumulation:	No
LogPow:	No data available.
BCF:	No data available.
Product/substance	Sodium decyl sulphate
Potential bioaccumulation:	No data available.
LogPow:	1,72
BCF:	No data available.
Product/substance	ammonium chloride
Potential bioaccumulation:	No
LogPow:	No data available.
BCF:	No data available.
Product/substance	2-methylpentane-2,4-diol
Potential bioaccumulation:	No
LogPow:	No data available.
BCF:	No data available.

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Product/substance	ethanediol
Potential bioaccumulation:	No
LogPow:	-1,36
BCF:	No data available.

12.4. Mobility in soil

No data available.

12.5. ▼ Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste. (*)

HP 14 – Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

16 03 05* Organic wastes containing dangerous substances

Specific labelling

▼ Contaminated packing

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
AD R	-	-	-	-	-	-
IM DG	-	-	-	-	-	-
IAT A	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

UK-REACH, Annex XVII

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether is subject to restrictions, UK-REACH annex XVII (entry 55).

Additional information

Not applicable.

Sources

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

Yes

▼ SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H225, Highly flammable liquid and vapour.

H301, Toxic if swallowed.

H302, Harmful if swallowed.

H311, Toxic in contact with skin.

H315, Causes skin irritation.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H331, Toxic if inhaled.

H360FD, May damage fertility. May damage the unborn child.

H361d, Suspected of damaging the unborn child.

H370, Causes damage to organs.

H371, May cause damage to organs.

H373, May cause damage to organs through prolonged or repeated exposure.

H373, May cause damage to organs through prolonged or repeated exposure. (Oral)

H400, Very toxic to aquatic life.

H410, Very toxic to aquatic life with long lasting effects.

H412, Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System
 EWC = European Waste Catalogue
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IARC = International Agency for Research on Cancer (IARC)
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 OECD = Organisation for Economic Co-operation and Development
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SCL = A specific concentration limit
 SVHC = Substances of Very High Concern
 STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 TWA = Time weighted average
 UN = United Nations
 UVBC = Unknown or variable composition, complex reaction products or of biological materials
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

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New Zealand (English) 0800 446 881

▼ The safety data sheet is validated by

Charlotta Reimertz

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en