

SAFETY DATA SHEET

Forrex EVO

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

1.1. Product identifier

Trade name

Forrex EVO

Product no.

14-2500-01

Unique formula identifier (UFI)

KR6C-T70X-H94G-WHTF

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 Vehicle Fire Protection AB

Mediavägen 10 , Box 2039

S-13502 Tyresö

Sweden

+ 46 10 1768100

<http://www.dafo-vehicle.com>

Contact person

CHR

E-mail

support@dafo-vehicle.com

Revision

21/03/2024

SDS Version

1.0

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.

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazard pictogram(s)



Signal word

Warning

Hazard statement(s)

Causes serious eye irritation. (H319)

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

Precautionary statement(s)

General

-

Prevention

Do not breathe vapour/mist. (P260)

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)

Get medical advice/attention if you feel unwell. (P314)

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

Storage

-

Disposal

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

Hazardous substances

ethanediol

Additional labelling

UFI: KR6C-T70X-H94G-WHTF

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
ethanediol	CAS No.: 107-21-1 EC No.: 203-473-3 UK-REACH: 01-2119456816-28-XXXX Index No.: 603-027-00-1	15-25%	Acute Tox. 4, H302 STOT RE 2, H373 (Oral)	[1]
D-Glucopyranose, oligomers, decyl octyl glycosides	CAS No.: 68515-73-1 EC No.: 500-220-1 UK-REACH: 01-2119488530-36 Index No.:	1-3%	Eye Dam. 1, H318 (SCL: 10.00 %) Eye Irrit. 2, H319 (SCL: 3.00 %)	[19]
ammonium chloride	CAS No.: 12125-02-9 EC No.: 235-186-4 UK-REACH: Index No.: 017-014-00-8	1-3%	Acute Tox. 4, H302 Eye Irrit. 2, H319	
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	CAS No.: 1469983-49-0 EC No.: 939-455-3 UK-REACH: UK-01-5723494305-8-xxxx Index No.:	1-3%	Eye Dam. 1, H318 Aquatic Chronic 2, H411	
Sodium 4(or 5)-methyl-1H-benzotriazolide	CAS No.: 64665-57-2 EC No.: 265-004-9 UK-REACH:	<0.25%	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318	

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.

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

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

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention.

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

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

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

Avoid direct contact with the product.

Avoid contact during pregnancy and while nursing.

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 (<60 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

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.

ammonium chloride

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

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

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

1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	3000 µg/kgbw/day
Long term – Systemic effects - General population	Dermal	3 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	6000 µg/kgbw/day

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Long term – Systemic effects - Workers	Dermal	6 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	5200 µg/m ³
Long term – Systemic effects - General population	Inhalation	5.2 mg/m ³
Long term – Systemic effects - Workers	Inhalation	21 200 µg/m ³
Long term – Systemic effects - Workers	Inhalation	21.2 mg/m ³
Long term – Systemic effects - General population	Oral	3000 µg/kgbw/day
Long term – Systemic effects - General population	Oral	3 mg/kg bw/day

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
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

D-Glucopyranose, oligomers, decyl octyl glycosides

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	357000 mg/kg
Long term – Systemic effects - General population	Dermal	357000 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	595000 mg/kg
Long term – Systemic effects - Workers	Dermal	595000 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	124 mg/m ³
Long term – Systemic effects - General population	Inhalation	124 mg/m ³
Long term – Systemic effects - Workers	Inhalation	420 mg / m ³
Long term – Systemic effects - Workers	Inhalation	420 mg/m ³
Long term – Systemic effects - General population	Oral	35.7 mg/kg
Long term – Systemic effects - General population	Oral	35.7 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

PNEC

1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		7.5 µg/L
Freshwater sediment		124 µg/kg
Intermittent release (freshwater)		26.6 µg/L
Intermittent release (marine water)		2.66 µg/L
Marine water		750 ng/L
Marine water sediment		12.4 µg/kg
Sewage treatment plant		100 mg/L
Soil		20.4 µg/kg

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

D-Glucopyranose, oligomers, decyl octyl glycosides

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		0,1 mg/l
Freshwater		176 µg/L
Freshwater sediment		0.487 mg/kg
Freshwater sediment		1.516 mg/kg
Intermittent release (freshwater)		270 µg/L
Marine water		0,01mg/l
Marine water		17.6 µg/L
Marine water sediment		0.048 mg/kg
Marine water sediment		152 µg/kg
Predators		111.11 mg/kg
Sewage treatment plant		560 mg/L
Soil		654 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

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. Pay special attention to 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

Work situation	Type	Class	Colour	Standards	
In case of inadequate ventilation	A	Class 1 (low capacity)	Brown	EN14387	

Skin protection

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

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Vinyl/PVC	0.6	-	-	
Latex	0.08	-	-	

Eye protection

Type	Standards
Safety glasses	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

7,5-9

Density (g/cm³)

~1,18

Kinematic viscosity

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

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

-40

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 (LogKow)

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

Other physical and chemical parameters

No data available.

Oxidizing properties

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

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

Acute toxicity

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

Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	2000.00 mg/kg

Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Species:	Rat
Route of exposure:	Oral
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	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Test method:	OECD 401
Species:	Rat, male/female
Route of exposure:	Oral
Test:	LD50
Result:	2950 mg/kg
Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Test method:	OECD 402
Species:	Rat, male/female
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kg
Product/substance	Sodium 4(or 5)-methyl-1H-benzotriazolide
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	2000.00 mg/kg

Skin corrosion/irritation

Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Test method:	OECD 405
Species:	Rabbit
Result:	No adverse effect observed (Not irritating)

Serious eye damage/irritation

Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Test method:	OECD 405
Species:	Rabbit

Causes serious eye irritation.

Respiratory sensitisation

Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Test method:	OECD 406
Species:	Guinea pig
Result:	No adverse effect observed (not sensitising)

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

Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Test method:	OECD 422
Species:	Rat, male/female
Test:	NOAEL
Result:	300 mg/kg
Conclusion:	No adverse effect observed

Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Test method:	OECD 414
Species:	Rat
Conclusion:	No adverse effect observed

STOT-single exposure

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

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

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	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

Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	20.71 mg/L

Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	21.00 mg/L

Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	37.00 mg/L

Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
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Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	100.00 mg/L
Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Species:	Crustacean
Duration:	96 hours
Test:	EC50
Result:	151 mg/L
Product/substance	ammonium chloride
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	43.00 mg/L
Product/substance	ammonium chloride
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	136.60 mg/L
Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Test method:	OECD 203
Species:	Fish, Pimephales promelas
Duration:	96 hours
Test:	LC50
Result:	2,66 mg/L
Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Species:	Daphnia, Daphnia magna
Duration:	48 hours
Test:	EC50
Result:	4 mg/L
Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	2,26 mg/L
Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Species:	Algae
Duration:	72 hours
Test:	NOEC
Result:	0,76 mg/L
Product/substance	1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Test method:	OECD 209
Species:	Bacteria
Compartment:	Activated Sludge Plant
Duration:	3 hours
Test:	NOEC
Result:	1000 mg/L
Product/substance	Sodium 4(or 5)-methyl-1H-benzotriazolide
Species:	Fish
Duration:	96 hours

Test: LC50
Result: 100.00 mg/L

12.2. Persistence and degradability

Product/substance ethanediol
Result: 90 %
Conclusion: Readily biodegradable

Product/substance D-Glucopyranose, oligomers, decyl octyl glycosides
Result: 100 %
Conclusion: Readily biodegradable
Test: OECD 301 E

Product/substance 1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Result: 57%
Conclusion: Readily biodegradable

12.3. Bioaccumulative potential

Product/substance ethanediol
LogKow: -1,36
Conclusion: No potential for bioaccumulation

Product/substance D-Glucopyranose, oligomers, decyl octyl glycosides
LogKow: 1.77
Conclusion: -

Product/substance ammonium chloride
Conclusion: No potential for bioaccumulation

Product/substance 1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Conclusion: No potential for bioaccumulation

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

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste. (*)
HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
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

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

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:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* 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.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

Sources

The Management of Health and Safety at Work Regulations 1999.

The Health and Safety at Work etc. Act 1974 Regulations 2013.

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

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H302, Harmful if swallowed.

H314, Causes severe skin burns and eye damage.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

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

H411, Toxic 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.

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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 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