SAFETY DATA SHEET

Forrex

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

1.1. Product identifier

Trade name

Forrex

Product no.

57-1050-00

Unique formula identifier (UFI)

11M1-VJGU-KMKV-MUK5

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

Relevant identified uses of the substance or mixture

Appliance protection

▼Uses advised against

No special.

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

08/09/2022

SDS Version

5.0

Date of previous version

28/01/2022 (4.0)

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

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)

Safety statement(s)

General

-

Prevention

Do not breathe vapour/mist. (P260)

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

Response

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 to an approved waste disposal plant. (P501)

▼Hazardous substances

ethanediol

C6 fluorotelomer-based surfactant

▼Additional labelling

Not applicable.

2.3. Other hazards

▼Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

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

▼3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
ethanediol	CAS No.: 107-21-1 EC No.: 203-473-3 UK-REACH: Index No.: 603-027-00-1	15-24,9%	Acute Tox. 4, H302 STOT RE 2, H373 (Oral)	[1]
2-ethylhexanol, ethoxylated, phosphated, sodium salt	CAS No.: 111798-26-6 EC No.: 601-122-2 UK-REACH: Index No.: 601-122-2	1-3%	Skin Irrit. 2, H315 Eye Dam. 1, H318	
D-Glucopyranose, oligomers, decyl octyl glycosides	CAS No.: 68515-73-1 EC No.: 500-220-1 UK-REACH: Index No.:	1-3%	Eye Dam. 1, H318 (SCL: 10.00 %) Eye Irrit. 2, H319 (SCL: 3.00 %)	
Blend of Fluorinated substances C6(PFAS)	CAS No.: 00-00-0 EC No.: UK-REACH: Index No.:	<1%		
C6 fluorotelomer-based surfactant	CAS No.: 00-00-0 EC No.: UK-REACH: Index No.:	<1%	Acute Tox. 4, H302 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	CAS No.: 112-34-5 EC No.: 203-961-6 UK-REACH: Index No.: 603-096-00-8	<0.1%	Eye Irrit. 2, H319	[1], [3]
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

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

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

Ingestion

Provide plenty of water for the person to drink and stay with him/her. 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 victim 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.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

▼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.

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials 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.

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

—

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.

—

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

—

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

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/m³
Long term – Systemic effects - Workers	Inhalation	68 mg/m3
Long term – Systemic effects - Workers	Inhalation	10 ppm
Short term – Local effects - General population	Inhalation	60.7 mg/m3
Short term – Local effects - Workers	Inhalation	101,2 mg/m3
Short term – Local effects - Workers	Inhalation	101.2 mg/m³
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	1 mg/m3
Long term – Systemic	Dermal	22.5 mg/kg bw/day

effects - General population		
Long term – Systemic effects - Workers	Dermal	2 mg/kg
Long term – Systemic effects - Workers	Dermal	63 mg/kg bw/day
Long term – Local effects - General population	Inhalation	25 mg/m3
Long term – Local effects - General population	Inhalation	25 mg/m³
Long term – Local effects - Workers	Inhalation	49 mg/m3
Long term – Local effects - Workers	Inhalation	49 mg/m³
Long term – Systemic effects - General population	Inhalation	3.5 mg/m3
Long term – Systemic effects - General population	Inhalation	7.83 mg/m³
Long term – Systemic effects - Workers	Inhalation	14 mg/m3
Long term – Systemic effects - Workers	Inhalation	44.43 mg/m³
Short term – Local effects - General population	Inhalation	49 mg/m3
Short term – Local effects - General population	Inhalation	49 mg/m³
Short term – Local effects - Workers	Inhalation	98 mg/m3
Short term – Local	Inhalation	98 mg/m³

effects - Workers		
Long term – Systemic effects - General population	Oral	1 mg/kg
Long term – Systemic effects - General population	Oral	2.25 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/m3
Long term – Systemic effects - General population	Inhalation	124 mg/m³
Long term – Systemic effects - Workers	Inhalation	420 mg / m3
Long term – Systemic effects - Workers	Inhalation	420 mg/m³
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/m3
Long term – Local effects - General population	Inhalation	7 mg/m³
Long term – Local effects - Workers	Inhalation	35 mg/m3
Long term – Local effects - Workers	Inhalation	35 mg/m³

▼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		429 µg/L
Freshwater sediment		1.79 mg/ kg
Freshwater sediment		1.59 mg/kg
Intermittent release (freshwater)		4.29 mg/L
Marine water		0.0429 mg/l
Marine water		42.9 µg/L
Marine water sediment		0.179 mg/kg
Marine water sediment		159 µg/kg
Sewage treatment plant		20 mg/l
Sewage treatment plant		20 mg/L
Soil		0.11 mg/kg
Soil		66 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		270 µg/L

(freshwater)	
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 emergency eyewash and -showers are clearly marked.

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

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

Hand protection

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

Eye protection

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

Red

Odour / Odour threshold

Characteristic

pH

7,7-8,3

Density (g/cm³)

~1,15

▼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)

-50

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.

▼Ignition (°C)

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

▼Auto flammability (°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

Not applicable

Solubility in fat (g/L)

Not applicable

9.2. Other information

▼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

No special.

▼10.4. Conditions to avoid

No special.

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
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	5840.00 mg/kg
Other information	
Product/substance	ethanediol
Test method	

Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	9530.00 mg/kg
Other information	
Product/substance	ethanediol
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	7712.00 mg/kg
Other information	
Product/substance	ethanediol
Test method	
Species	Mouse
Route of exposure	Dermal
Test	LD50
Result	3500.00 mg/kg
Other information	
Product/substance	2-ethylhexanol, ethoxylated, phosphated, sodium salt
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	
Other information	
Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Test method	

Species	Rat
Route of exposure	Dermal
Test	LD50
Result	2000.00 mg/kg
Other information	
Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	2000.00 mg/kg
Other information	
Product/substance	C6 fluorotelomer-based surfactant
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	300 mg/kg
Other information	
Product/substance	C6 fluorotelomer-based surfactant
Test method	
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	>2000 mg/kg
Other information	
Product/substance	C6 fluorotelomer-based surfactant
Test method	

Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	0,16 µg/L
Other information	
Product/substance	2-methylpentane-2,4-diol
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	3700.00 mg/kg
Other information	
Product/substance	2-methylpentane-2,4-diol
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	8560.00 mg/kg
Other information	
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Test method	
Species	Mouse
Route of exposure	Oral
Test	LD50
Result	2410.00 mg/kg
Other information	
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Test method	

Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	29.00 ppm
Other information	
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	2764.00 mg/kg
Other information	
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	5660.00 mg/kg
Other information	

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

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

No special.

▼Other information

No special.

SECTION 12: Ecological information

▼12.1. Toxicity

Product/substance	ethanediol
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	72860.00 mg/L
Other information	
Product/substance	ethanediol
Test method	
Species	Algae
Compartment	
Duration	96 hours

Test	EC50
Result	6500.00 mg/L
Other information	
Product/substance	ethanediol
Test method	
Species	Daphnia
Compartment	
Duration	No data available.
Test	NOEC
Result	8590.00 mg/L
Other information	
Product/substance	2-ethylhexanol, ethoxylated, phosphated, sodium salt
Test method	
Species	Fish, Oncorhynchus mykiss
Compartment	
Duration	96 hours
Test	LC50
Result	75 mg/L
Other information	
Product/substance	2-ethylhexanol, ethoxylated, phosphated, sodium salt
Test method	
Species	Daphnia, Daphnia magna
Compartment	
Duration	48 hours
Test	
Result	267 mg/L
Other information	
Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides

Test method	
Species	Algae
Compartment	
Duration	72 hours
Test	EC50
Result	20.71 mg/L
Other information	
Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	21.00 mg/L
Other information	
Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Test method	
Species	Algae
Compartment	
Duration	72 hours
Test	EC50
Result	37.00 mg/L
Other information	
Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Test method	
Species	Daphnia
Compartment	
Duration	48 hours

Test	EC50
Result	100.00 mg/L
Other information	
Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Test method	
Species	Crustacean
Compartment	
Duration	96 hours
Test	EC50
Result	151 mg/L
Other information	
Product/substance	C6 fluorotelomer-based surfactant
Test method	OECD 203
Species	Fish, Danio rerio
Compartment	
Duration	96 hours
Test	LC50
Result	>100 mg/L
Other information	
Product/substance	C6 fluorotelomer-based surfactant
Test method	OECD 202
Species	Crustacean, Daphnia magna
Compartment	
Duration	48 hours
Test	EC50
Result	7,41 mg/L
Other information	
Product/substance	C6 fluorotelomer-based surfactant

Test method	OECD 201
Species	Algae
Compartment	
Duration	72 hours
Test	EC50
Result	0,62 mg/L
Other information	
Product/substance	2-methylpentane-2,4-diol
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	8510.00 mg/L
Other information	
Product/substance	2-methylpentane-2,4-diol
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	5410.00 mg/L
Other information	
Product/substance	2-methylpentane-2,4-diol
Test method	
Species	Algae
Compartment	
Duration	72 hours

Test	IC50
Result	429.00 mg/L
Other information	
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	1300.00 mg/L
Other information	
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	100.00 mg/L
Other information	
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Test method	
Species	Algae
Compartment	
Duration	96 hours
Test	EC50
Result	100.00 mg/L
Other information	

12.2. Persistence and degradability

Product/substance	ethanediol
Biodegradable	Yes
Test method	
Result	90 %
Product/substance	2-ethylhexanol, ethoxylated, phosphated, sodium salt
Biodegradable	Yes
Test method	OECD 301 A
Result	62%
Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Biodegradable	Yes
Test method	OECD 301 E
Result	100 %
Product/substance	2-methylpentane-2,4-diol
Biodegradable	Yes
Test method	OECD 301 F
Result	81 %
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Biodegradable	Yes
Test method	OECD 301 C
Result	80 %

▼12.3. Bioaccumulative potential

Product/substance	ethanediol
Test method	
Potential bioaccumulation	No
LogPow	No data available.
BCF	No data available.
Other information	

Product/substance	2-ethylhexanol, ethoxylated, phosphated, sodium salt
Test method	
Potential bioaccumulation	No
LogPow	No data available.
BCF	No data available.
Other information	
Product/substance	D-Glucopyranose, oligomers, decyl octyl glycosides
Test method	
Potential bioaccumulation	No data available.
LogPow	1.77
BCF	No data available.
Other information	
Product/substance	2-methylpentane-2,4-diol
Test method	
Potential bioaccumulation	No
LogPow	No data available.
BCF	No data available.
Other information	
Product/substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether
Test method	
Potential bioaccumulation	No
LogPow	No data available.
BCF	No data available.
Other information	

▼12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

▼12.6. Endocrine disrupting properties

No special.

▼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 06 Organic wastes other than those mentioned in 16 03 05

▼Specific labelling

Not applicable.

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.

▼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

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

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.

H370, Causes damage to organs.

H371, May cause damage to organs.

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

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

H400, Very toxic to aquatic life.

H410, Very 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

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

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.

Emergency Phone No.:

France (English, French) +33 1 72 11 00 03

Germany (English , German) + 49 89 220 61 012 / 0800 000 7801

Spain (English, Spanish) + 34 91114 2520

Italy (English, Italian) + 39 02 3604 2884

Netherlands (English, Dutch) + 31 10713 8195

Middle East (English , Arabic) + 44 1273 289454

United States (English, French, Spanish) + 1 866 928 0789

Canada (English, French) + 1 800 579 7421

United States and Canada (English) + 1 202 464 2554

Mexico (English, Spanish) + 52 55 5004 8763

Brazil (Portuguese, Spanish, English) + 55 11 3197 5891

Chile (English, Spanish) + 56 2 2582 9336

Colombia (English, Spanish) + 57 1 508 7337

Argentina (English, Spanish) + 54 11 5984 3690

East/South East Asia (English, Bahasa Malaysia, Hindi, Japanese, Korean, Mandarin, Tagalog) +65 3158 1412

China (English, Mandarin) + 86 512 8090 3042

China (Mainland) (English, Mandarin) + 86 532 8388 9090

Japan (English, Japanese) + 81 3 4578 9341

Malaysia (English, Malaysian) 60 3 6207 4347

India (English, Hindi) 000 800 100 7479 7479

Philippines (English, Tagalog) + 63 28231 2149

South Korea (English, Korean) + 82 2 3479 8401

Australia (English) 18000 74234

New Zealand (English) + 64 9 929 1483

New Zealand (English) 0800 446 881

Dafo Fomtec Products comply with EU regulation-PFAS restriction: EU 2017/1000;EU 2020/784; EU 2021/1297 and POP regulation 2020/1021 supported by current analytical methods.

▼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