

## SAFETY DATA SHEET

## Forrex AB-50

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

## 1.1. Product identifier

## Trade name

Forrex AB-50

## Product no.

57-1050-25

## ▼ Unique formula identifier (UFI)

No data available

## 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

## SDS date

2021-01-25

## SDS Version

2.0

## Date of previous version

2020-04-03 (1.0)

## 1.4. Emergency telephone number

NCEC CareChem24: +44 1273 289451

Additional Emergency Phone Number in section 16

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP)

## 2.2. Label elements

## Hazard pictogram(s)

Not applicable

## Signal word

Not applicable

## Hazard statement(s)

Not applicable

## Safety statement(s)

General

-

Prevention

-

Response

-

Storage

-

Disposal

-

Hazardous substances

No special

2.3. Other hazards

▼ Additional labelling

EUH210, Safety data sheet available on request.

▼

Additional warnings

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

SECTION 3: Composition/information on ingredients

▼ 3.2 Mixtures

Product/Ingredient name	Identifiers	% w/w	Classification	Note
ethanediol	CAS No.: 107-21-1 EC No.: 203-473-3 REACH No.: 01-2119456816-28 Index No.: 603-027-00-1	15-24.9%	Acute Tox. 4, H302	EU
D-Glucopyranose, oligomers, decyl octyl glycosides	CAS No.: 68515-73-1 EC No.: 500-220-1 REACH No.: 01-2119488530-36 Index No.:	1-3%	Eye Dam. 1, H318 (SCL: 10.00 %)	

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

Other information

EU: European occupational exposure limit

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

Upon irritation of the eye: Remove contact lenses and open eyes widely. Flush eyes with water or saline water(20-30°C) for at least 5 minutes. Seek medical assistance and 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

No special

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

No special

#### 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

Fire fighters should wear appropriate personal protective equipment.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

No specific requirements

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

#### 6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste.

See section on 'Exposure controls/personal protection' for protective measures.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

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

See section on 'Exposure controls/personal protection' for information on personal protection.

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

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

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

##### ▼ Storage temperature

Temperatur

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/m<sup>3</sup>): 10(particulate)/52(vapour)

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

Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 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

Product/Ingredient name	DNEL	Route of exposure	Duration
ethanediol	35 mg/m <sup>3</sup>	Inhalation	Long term – Local effects - Workers
ethanediol	7 mg/m <sup>3</sup>	Inhalation	Long term – Local effects - General population
ethanediol	106 mg/kg	Dermal	Long term – Systemic effects - Workers
ethanediol	53 mg/kg	Dermal	Long term – Systemic effects - General population
D-Glucopyranose, oligomers, decyl octyl glycosides	595000 mg/kg	Dermal	Long term – Systemic effects - Workers
D-Glucopyranose, oligomers, decyl octyl glycosides	420 mg / m <sup>3</sup>	Inhalation	Long term – Systemic effects - Workers
D-Glucopyranose, oligomers, decyl octyl glycosides	124 mg/m <sup>3</sup>	Inhalation	Long term – Systemic effects - General population
D-Glucopyranose, oligomers, decyl octyl glycosides	35.7 mg/kg	Oral	Long term – Systemic effects - General population
D-Glucopyranose, oligomers, decyl octyl glycosides	357000 mg/kg	Dermal	Long term – Systemic effects - General population

#### PNEC

Product/Ingredient name	PNEC	Route of exposure	Duration of Exposure
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ethanediol	1.53 mg/kg	Soil	No data available
ethanediol	10 mg/L	Freshwater	No data available
ethanediol	1 mg/L	Marine water	No data available
ethanediol	3.7 mg/kg	Marine water sediment	No data available
ethanediol	37 mg/kg	Freshwater sediment	No data available
D-Glucopyranose, oligomers, decyl octyl glycosides	0,1 mg/l	Freshwater	No data available
D-Glucopyranose, oligomers, decyl octyl glycosides	0,01mg/l	Marine water	No data available
D-Glucopyranose, oligomers, decyl octyl glycosides	0.487 mg/kg	Freshwater sediment	No data available
D-Glucopyranose, oligomers, decyl octyl glycosides	0.048 mg/kg	Marine water sediment	No data available

#### ▼ 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

Airborne gas and dust concentrations 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

No specific requirements

##### Individual protection measures, such as personal protective equipment

##### Generally

Use only CE 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

#### Form

Liquid

#### Colour

Red

#### Odour

Characteristic

#### Odour threshold (ppm)

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

#### pH

7.7-8.3

#### Density (g/cm<sup>3</sup>)

~1.15

#### ▼ Viscosity

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

#### Phase changes

##### Melting point (°C)

-50

##### Boiling point (°C)

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

##### Vapour pressure

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

##### Vapour density

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

##### Decomposition temperature (°C)

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

##### Evaporation rate (n-butylacetate = 100)

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

#### Data on fire and explosion hazards

##### Flash point (°C)

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

##### Ignition (°C)

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

##### Auto flammability (°C)

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

##### Explosion limits (% v/v)

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

##### Explosive properties

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

#### Oxidizing properties

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

#### Solubility

##### Solubility in water

Soluble

##### ▼ n-octanol/water coefficient

Not applicable

##### ▼ Solubility in fat (g/L)

Not applicable

#### 9.2. Other information

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No data available

#### 10.2. Chemical stability

The product is stable under the conditions, noted in the section "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 toxicological effects

##### ▼ Acute toxicity

Product/Ingredient name	Species	Test	Route of exposure	Result
ethanediol	Rat	LD50	Oral	5840.00 mg/kg
ethanediol	Rabbit	LD50	Dermal	9530.00 mg/kg
ethanediol	Rat	LD50	Oral	7712.00 mg/kg
ethanediol	Mouse	LD50	Dermal	3500.00 mg/kg
D-Glucopyranose, oligomers, decyl octyl glycosides	Rat	LD50	Dermal	2000.00 mg/kg
D-Glucopyranose, oligomers, decyl octyl glycosides	Rat	LD50	Oral	2000.00 mg/kg

##### Skin corrosion/irritation

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

##### Serious eye damage/irritation

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

##### ▼ 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.

#### Long term effects

No special

#### Other information

No special

## SECTION 12: Ecological information

### 12.1. Toxicity

Product/Ingredient name	Species	Test	Duration	Result
ethanediol	Fish	LC50	96 hours	72860.00 mg/L
ethanediol	Algae	EC50	96 hours	6500.00 mg/L
ethanediol	Daphnia	NOEC	No data available.	8590.00 mg/L
D-Glucopyranose, oligomers, decyl octyl glycosides	Algae	EC50	72 hours	20.71 mg/L
D-Glucopyranose, oligomers, decyl octyl glycosides	Fish	LC50	96 hours	21.00 mg/L
D-Glucopyranose, oligomers, decyl octyl glycosides	Algae	EC50	72 hours	37.00 mg/L
D-Glucopyranose, oligomers, decyl octyl glycosides	Daphnia	EC50	48 hours	100.00 mg/L
D-Glucopyranose, oligomers, decyl octyl glycosides	Crustacean	EC50	96 hours	151 mg/L

### ▼ 12.2. Persistence and degradability

Product/Ingredient name	Biodegradability	Test	Result
ethanediol	Yes		90 %
D-Glucopyranose, oligomers, decyl octyl glycosides	Yes	OECD 301 E	100 %

### 12.3. Bioaccumulative potential

Product/Ingredient name	Potential bioaccumulation	LogPow	BCF
ethanediol	No	No data available	No data available



D-Glucopyranose, oligomers, decyl octyl glycosides	No data available	1.77	No data available
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#### 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. Other adverse effects

No special

### SECTION 13: Disposal considerations

#### ▼ 13.1. Waste treatment methods

##### 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 - 14.4

Not dangerous goods according to ADR, IATA and IMDG.

##### ADR/RID

Not applicable

##### IMDG

Not applicable

##### ▼ IATA

Not applicable

##### ▼ "MARINE POLLUTANT"

No

#### 14.5. Environmental hazards

Not applicable

#### 14.6. Special precautions for user

Not applicable

#### ▼ 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

##### Additional information

Not applicable

#### ▼ Sources

Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.  
 Commission Regulation (EU) No 1357/2014 of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste.  
 Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).  
 Regulation (EC) 1907/2006 (REACH).

#### 15.2. Chemical safety assessment

Yes

### SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

H302, Harmful if swallowed.  
 H318, Causes serious eye damage.

#### 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  
 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  
 UVCB = Complex hydrocarbon substance  
 VOC = Volatile Organic Compound  
 vPvB = Very Persistent and Very Bioaccumulative

#### Additional information

Not applicable

Emergency Phone No.:

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

Germany (English, German) + 49 89 220 61 012 / 0800 000 7801/ +49 (0)30 686 700

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

The safety data sheet is validated by

charlotta@fomtec.com

#### 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.