

Safety Data Sheet

FOMTEC AFFF 1% F

Issue Date 19/09/2012
Revision Date 20/09/2019

Status ISSUED BY: Fire Protection Technologies

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product name:	Fomtec AFFF 1% F
Article no:	10-1008-XX
Importer / Supplier:	Fire Protection Technologies
Address	Unit 1/251 Ferntree Gully Road Mt Waverley, Victoria, 3149 Australia.
Telephone Number	1300 742 296
Emergency Telephone No.	24 hours 1300 742 296
Emergency Services	Dial 000
SDS Preparer	Fire Protection Technologies
Manufacturer:	Dafo Fomtec AB Box 683 SE-13526 Tyreso Sweden www.fomtec.com

2. HAZARD IDENTIFICATION

2.1 Classification of substance or mixture

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

2.2 Label elements

Hazard Pictogram(s)



Signal word	Warning
Hazard statements	Causes serious eye irritation
Safety statements	General Prevention:

P280, Wear eye protection.
 P264, Wash hands/exposed areas thoroughly after handling.
 Response:
 P337+P313, If eye irritation persists: Get medical advice/attention.
 P305+P351+P338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Product / Ingredient Name	Identifier Number	% w/w	CLP	Note
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	CAS no.: 112-34-5 EC no.: 203-961-6 Index no.: 603-096-00-8	25-40%	Eye Irrit. 2, H319	Annex XVII, EU
Sodium decyl sulphate	CAS no.: 142-87-0 EC no.: 205-568-5	5-10%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412	
D-Glucopyranose, oligomers, decyl octyl glycosides	CAS no.: 68515-73-1 EC no.: 500-220-1	1-3%	Eye Dam. 1, H318	
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	EC no.: 939-455-3 REACH No.: 01- 2119970722-34-0000	>1%	Eye Dam. 1, H318 Aquatic Chronic 3, H412	

4. FIRST AID MEASURES

4.1 Description of first aid measures

General	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	Bring the person into fresh air and stay with him/her.
Skin contact	Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
Eye contact	Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 15 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.

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

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

This 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 poisons information service in order to obtain further advice.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

No specific requirements

6.2 Environmental precautions

No specific requirements

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, 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.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms.

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

Dry, cool and well ventilated (<55°C)

7.3 Specific end use(s)

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

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	
Long term exposure limit (8 hours):	10ppm
Long term exposure limit (8 hours):	67, mg/m ³
Short term exposure limit (15 minutes):	15 ppm
Short term exposure limit (15 minutes):	101,2 mg/m ³

DNEL / PNEC

Product/Ingredient Name	DNEL	Route of Exposure	Duration
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	68 mg/m ³	Inhalation	Long term – Systemic effects - Workers
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	101,2 mg/m ³	Inhalation	Short term – Local effects - Workers
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	83 mg/kg	Dermal	Long term – Systemic effects – Workers
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	10 ppm	Inhalation	Long term – Systemic effects - Workers
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	60.7 mg/m ³	Inhalation	Short term – Local effects – General population
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	50 mg/kg	Dermal	Long term – Systemic effects – General population
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	5 mg/kg	Oral	Long term – Systemic effects – General population

Sodium decyl sulphate	4060 mg/kg	Dermal	Short term – Systemic effects - Workers
Sodium decyl sulphate	285 mg/m ³	Inhalation	Short term – Systemic effects - Workers
Sodium decyl sulphate	2440 mg/kg	Dermal	Long term – Systemic effects – General population
Sodium decyl sulphate	85 mg/m ³	Inhalation	Long term – Systemic effects – General population
Sodium decyl sulphate	24 mg/kg	Oral	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 ³	Inhalation	Long term – Systemic effects - Workers
D-Glucopyranose, oligomers, decyl octyl glycosides	357000 mg/kg	Dermal	Long term – Systemic effects – General population
D-Glucopyranose, oligomers, decyl octyl glycosides	124 mg/m ³	Inhalation	Long term – Systemic effects – General population
D-Glucopyranose, oligomers, decyl octyl glycosides	35.7 mg/kg	Oral	Long term – Systemic effects – General population
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0,33 mg/kg	Dermal	Long term – Systemic effects - Workers
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	1,18 mg/m ³	Inhalation	Long term – Systemic effects - Workers
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0.17 mg/kg	Dermal	Long term – Systemic effects – General population
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0.29 mg/m ³	Inhalation	Long term – Systemic effects – General population
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0.17 mg/kg	Oral	Long term – Systemic effects – General population
Product/Ingredient Name	PNEC	Route of Exposure	Duration of Exposure
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	1.1 mg/L	Freshwater	No data available
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	0,11 mg/L	Marine water	No data available
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	0,44 mg/L	Marine water sediment	No data available
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	4.4mg/kg	Freshwater sediment	No data available

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	0.32 mg/kg	Soil	No data available
Sodium decyl sulphate	0,095 mg/l	Freshwater	No data available
Sodium decyl sulphate	0,0095 mg/l	Marine water	No data available
Sodium decyl sulphate	1,5 mg/kg	Freshwater sediment	No data available
Sodium decyl sulphate	0,15 mg/kg	Marine water sediment	No data available
Sodium decyl sulphate	0,2445 mg/kg	Soil	No data available
Sodium decyl sulphate	0,086 mg/l	Intermittent release	No data available
D-Glucopyranose, oligomers, decyl octyl glycosides	0,1 mg/l	Freshwater	No data available
D-Glucopyranose, oligomers, decyl octyl glycosides	0,01 mg/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
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0,021 mg/l	Freshwater	Continuous
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0,00152 mg/l	Marine water	No data available
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0,697 mg/kg	Marine water sediment	No data available
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0,0414 mg/kg	Soil	No data available
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	6.97 mg/kg	Freshwater sediment	No data available
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	100 mg/l	Sewage Treatment Plant	No data available

8.2 Exposure controls

General recommendations	Smoking, eating and drinking are not allowed in the work premises.
Exposure scenarios	In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.
Exposure limits	Professional users are subjected to the legally set maximum concentrations for occupational exposure.



Appropriate technical measures	Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eye wash 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.
Personal Protective Equipment	Use only CE marked protective equipment
Skin protection	Dedicated work clothing should be worn
Hand protection material	Vinyl / PVC
Hand protection glove thickness (mm)	0.6
Eye protection	Wear safety glasses with side shields – Standards EN166

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	Liquid
Colour	Pale yellow
Odour	Characteristic
pH	6.5-8.5
Density (g/cm ³)	~1.035
Melting point	-14°C
Solubility in water	Soluble
Viscosity	<20 mPa.s

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

None

10.4 Conditions to avoid

None



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

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicological data for substances

Substance	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether Type of toxicity: Acute Test: LD50 Route of exposure: Oral Result: 2410.00 mg/kg Species: Mouse Type of toxicity: Acute Test: LC50 Route of exposure: Inhalation Result: 29.00 ppm Animal test species: Rat Type of toxicity: Acute Test: LD50 Route of exposure: Dermal Result: 2764.00 mg/kg Animal test species: Rabbit Type of toxicity: Acute Test: LD50 Route of exposure: Oral Result: 5660.00 mg/kg Animal test species: Rat
Substance	Sodium decyl sulphate Type of toxicity: Acute Test: LD50 Route of exposure: Oral Result: 1200.00 mg/kg Animal test species: Rat Type of toxicity: Acute Test: LD50 Route of exposure: Dermal Result: 2000.00 mg/kg Animal test species: Rat
Substance	D-Glucopyranose, oligomers, decyl octyl glycosides

Substance	<p>Type of toxicity: Acute Test: LD50 Route of exposure: Dermal Result: 2000.00 mg/kg Animal test species: Rat</p> <p>Type of toxicity: Acute Test: LD50 Route of exposure: Oral Result: 2000.00 mg/kg Animal test species: Rat</p> <p>1-Propnaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-Sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts</p> <p>Type of toxicity: Acute Test: LD50 Route of exposure: Oral Result: 2950.00 mg/kg Animal test species: Rat</p> <p>Type of toxicity: Acute Test: LD50 Route of exposure: Dermal Result: 2000.00 mg/kg Animal test species: Rat</p>
Serious eye damage/irritation	Causes serious eye irritation

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Substance	<p>2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether</p> <p>Test: LC50 Duration: 96 hours Result: 1300.00 mg/l Species: Fish</p> <p>Test: EC50 Duration: 48 hours Result: 100.00 mg/l Species: Daphnia</p> <p>Test: EC50 Duration: 96 hours Result: 100.00 mg/l Species: Algae</p>
Substance	<p>Sodium decyl sulphate</p> <p>Test: LC50 Duration: 48 hours Result: 13.00 mg/l Species: Fish</p> <p>Test: EC50 Duration: 72 hours</p>

	<p>Result: 8.64 mg/l Species: Algae</p>
Substance	<p>D-Glucopyranose, oligomers, decyl octyl glycosides</p> <p>Test: EC50 Duration: 72 hours Result: 20.71 mg/l Species: Algae</p> <p>Test: LC50 Duration: 96 hours Result: 21.00 mg/l Species: Fish</p> <p>Test: EC50 Duration: 72 hours Result: 37.00 mg/l Species: Algae</p> <p>Test: EC50 Duration: 48 hours Result: 100.00 mg/l Species: Daphnia</p>
Substance	<p>1-Propnaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-Sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts</p> <p>Test: LC50 Duration: 6 hours Result: 0.23 mg/l Species: Fish</p> <p>Test: EC50 Duration: 48 hours Result: 4.00 mg/l Species: Daphnia</p> <p>Test: NOEC Duration: 72 hours Result: 0.76 mg/l Species: Algae</p>

12.2 Persistence and degradability

Substance	<p>2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether</p> <p>Biodegradability: Yes Test: OECD 301 C (Modified MITI Test) Result: 80%</p>
Substance	<p>Sodium decyl sulphate</p> <p>Biodegradability: Yes Test: OECD 301 D (Closed Bottle) Result: 80%</p>
Substance	<p>D-Glucopyranose, oligomers, decyl octyl glycosides</p> <p>Biodegradability: Yes Test: OECD 301 E (Modified OECD Screening Test)</p>

Substance **Result: 100%**
1-Propnaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-Sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Biodegradability: Yes
Result: 57%

12.3 Bio accumulative potential

Substance **2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether**
Potential Bioaccumulation: No

Substance **1-Propnaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl- 3-Sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts**
Potential Bioaccumulation: No

bio accumulative potential Bioaccumulation: Is not expected to be bio accumulable.

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

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product is not covered by regulations on dangerous waste

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

14. TRANSPORT INFORMATION

14.1 – 14.4

Not dangerous goods according to ADR, IATA and IMDG

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II or MARPOL and the IBC Code

Not applicable

15. REGULATORY INFORMATION

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

Sources	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)
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15.2 Chemical safety assessment

Chemical safety assessment	Yes
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16. OTHER INFORMTION

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 H412, Harmful to aquatic life with long lasting effects
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