Safety Data Sheet

Fomtec Enviro ARK

Revision Date 07/02/2022 **Status** ISSUED BY: Fire Protection Technologies

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

1.1 Product Identifier

Product name: Fomtec Enviro ARK

Product no: 12-3370-01

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
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SDS Preparer Fire Protection Technologies

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2. HAZARD IDENTIFICATION

2.1 Classification of substance or mixture

Eye Irrit. 2; H319 Causes serious eye irritation

2.2 Label elements

Hazard Pictogram(s)

Signal word	Warning
Hazard statements	H319: Causes serious eye irritation
Prevention	Wear eye protection/protective gloves/protective clothing (P280) Wash hands thoroughly after handling (P264)
Response	If eye irritation persists: Get medical advice/attention (P337+P313) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338)

2.3 Other hazards

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Substance	Identification	% w/w	Classification	Note
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	CAS No.: 112-34-5 EC No.: 203-961-6 REACH: 01-2119475104-44 Index No.: 603-096-00-8	5-10%	Eye Irrit. 2; H319	- European occupational exposure limit - According to UK REACH, Annex XVII, the substance is subject to restrictions
Sodium decyl sulphate	CAS No.: 142-87-0 EC No.: 205-568-5 REACH Reg No.: 01-2119970328-30-004	3-5%	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 (SCL: 20.00%) Aquatic Chronic 3; H412	
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 REACH: 01-2119970722-34-0000	1-3%	Eye Dam 1; H318 Aquatic Chronic 2; H411	
D-Glucopyranose, oligomers, decyl octyl glycosides	CAS No.: 68515-73-1 EC No.: 500-220-1 REACH: 01-2119488530-36	1-3%	Eye Dam. 1; H318 (SCL: 10.00%) Aquatic Acute 1; H400	

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 persons 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. 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.

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

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 National 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

Avoid discharge to lakes,, streams, sewers etc.

6.3 Methods and material for containment and cleaning up

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to lobal 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, drinking and consumption of food is not allowed in the work area.

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

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

8.1 Control parameters

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Long term exposure limit (8 hours) ppm: 10 Long term exposure limit (8 hours) mg/m³): 67,5 Short term exposure limit (15 minutes) (ppm): 15 Short term exposure limit (15 minutes) (mg/m³): 101,2

DNEL

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	**DNEL:** 68 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Systemic effects – Workers **DNEL:** 101,2 mg/m³ **Route of exposure:** Inhalation **Duration:** Short term – Local effects – Workers **DNEL:** 83 mg/kg **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – Workers **DNEL:** 10 ppm

	Route of exposure: Inhalation **Duration:** Long term – Systemic effects – Workers **DNEL:** 60.7 mg/m³ **Route of exposure:** Inhalation **Duration:** Short term – Local effects – General population **DNEL:** 50 mg/kg **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – General population **DNEL:** 5 mg/kg **Route of exposure:** Oral **Duration:** Long term – Systemic effects – General population
Sodium decyl sulphate	**DNEL:** 4060 mg/kg **Route of exposure:** Dermal **Duration:** Short term – Systemic effects – Workers **DNEL:** 285 mg/m³ **Route of exposure:** Inhalation **Duration:** Short term – Systemic effects – Workers **DNEL:** 2440 mg/kg **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – General population **DNEL:** 85 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Systemic effects – General population **DNEL:** 24 mg/kg **Route of exposure:** Oral **Duration:** Long term – Systemic effects – General population
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	**DNEL:** 6000 mg/kgbw/day **Route of exposure:** Dermal **Duration:** Short term – Systemic effects – Workers **DNEL:** 21200 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Systemic effects – Workers **DNEL:** 3000 mg/kgbw/day **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – General population **DNEL:** 5200 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Systemic effects – General population **DNEL:** 3000 mg/kgbw/day **Route of exposure:** Oral **Duration:** Long term – Systemic effects – General population **DNEL:** 3 mg/kgbw/day **Route of exposure:** Oral **Duration:** Long term – Systemic effects – General population **DNEL:** 3 mg/kgbw/day

	Route of exposure: Dermal **Duration:** Long term – Systemic effects – General population **DNEL:** 5.2 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Systemic effects – General population **DNEL:** 6 mg/kgbw/day **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – Workers **DNEL:** 21.2 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Systemic effects – Workers
D-Glucopyranose, oligomers, decyl octyl glycosides	**DNEL:** 595000 mg/kg **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – Workers **DNEL:** 420 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Systemic effects – Workers **DNEL:** 357000 mg/kg **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – General population **DNEL:** 124 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Systemic effects – General population **DNEL:** 35.7 mg/kg **Route of exposure:** Oral **Duration:** Long term – Systemic effects – General population
PNEC	
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	**PNEC:** 1.1 mg/L **Route of exposure:** Freshwater **PNEC:** 0,11 mg/L **Route of exposure:** Marine water **PNEC:** 0,44 mg/L **Route of exposure:** Marine water sediment **PNEC:** 4.4 mg/kg **Route of exposure:** Freshwater sediment **PNEC:** 032 mg/kg **Route of exposure:** Soil
Sodium decyl sulphate	**PNEC:** 0,095 mg/L **Route of exposure:** Freshwater **PNEC:** 0,0095 mg/L **Route of exposure:** Marine water **PNEC:** 1,5 mg/kg **Route of exposure:** Freshwater sediment

	PNEC: 0,15 mg/kg **Route of exposure:** Marine water sediment **PNEC:** 0,2445 mg/kg **Route of exposure:** Soil **PNEC:** 0,086 mg/L **Route of exposure:** Intermittent release
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	**PNEC:** 20.4 mg/kg **Route of exposure:** Soil **PNEC:** 12.4 mg/kg **Route of exposure:** Marine water sediment **PNEC:** 124 mg/kg **Route of exposure:** Freshwater sediment **PNEC:** 100 mg/L **Route of exposure:** Sewage treatment plant **PNEC:** 2.66 mg/L **Route of exposure:** Intermittent release (marine water) **PNEC:** 750 mg/L **Route of exposure:** Marine water **PNEC:** 26.6 mg/L **Route of exposure:** Intermittent release (freshwater) **PNEC:** 7.5 mg/L **Route of exposure:** Freshwater
D-Glucopyranose, oligomers, decyl octyl glycosides	**PNEC:** 0,1 mg/l **Route of exposure:** Freshwater **PNEC:** 0,01 mg/l **Route of exposure:** Marine water **PNEC:** 0.487 mg/kg **Route of exposure:** Freshwater sediment **PNEC:** 0.048 mg/kg **Route of exposure:** Marine water sediment

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.
Appropriate technical measures	The formation of vapours must be kept at a minimum and below current limit values. 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.
Skin protection	Dedicated work clothing should be worn
Hand protection	Vinyl/PVC Gloves – thickness 0.6mm
Eye protection	Wear safety glasses with side shields. Standards EN166

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Colour	Pale yellow
Odour	Characteristic
pH	6.2-7.2
Density (g/cm^3)	~ 1.01 (20°C)
Kinematic Viscosity	<3500 mPa.s (20°C)
Melting point/Freezing point (°C)	-4
Solubility in water	Soluble

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

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product / 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 **Species:** Rat **Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Dermal **Result:** 2764.00 mg/kg **Species:** Rabbit **Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Oral **Result:** 5660.00 mg/kg **Species:** Rat
Sodium decyl sulphate	**Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Oral **Result:** 1200.00 mg/kg **Species:** Rat **Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Dermal **Result:** 2000 mg/kg **Species:** Rat
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-,N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	**Type of toxicity:** Acute **Test method:** OECD 401 **Test:** LD50 **Route of exposure:** Oral **Result:** 2950 mg/kg **Species:** Rat, male/female **Type of toxicity:** Acute **Test method:** OECD 402 **Test:** LD50 **Route of exposure:** Dermal

	Result: >2000 mg/kg **Species:** Rat, male/female
D-Glucopyranose, oligomers, decyl octyl glycosides	**Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Dermal **Result:** 2000.00 mg/kg **Species:** Rat **Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Oral **Result:** 2000 mg/kg **Species:** Rat
Skin corrosion / irritation	
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 **Result:** No adverse effect observed (not irritating) **Species:** Rabbit
Serious eye damage / irritation	
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 **Other information:** Causes serious eye irritation
Respiratory sensitisation	
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 sensitizing)
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	
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
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

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.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Product / Substance	
2-(2- butoxyethoxy)ethanol; diethylene glycol monobutyl ether	**Test:** LC50 **Duration:** 96 hours **Result:** 1300.00 mg/L **Species:** Fish **Test:** EC50 **Duration:** 48 hours **Result:** 100.00 mg/L **Species:** Daphnia **Test:** EC50 **Duration:** 96 hours **Result:** 100.00 mg/L **Species:** Algae
Sodium decyl sulphate	**Test:** LC50 **Duration:** 48 hours **Result:** 13.00 mg/L **Species:** Fish **Test:** EC50 **Duration:** 72 hours **Result:** 8.64 mg/L **Species:** Algae **Test:** EC50 **Duration:** 24 hours **Result:** >100 mg/L **Species:** Daphnia
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	**Test:** LC50 **Duration:** 96 hours **Result:** 2.66 mg/L **Species:** Fish Pimephales promelas **Test:** EC50 **Duration:** 48 hours **Result:** 4 mg/L **Species:** Daphnia, Daphnia magna **Test:** EC50 **Duration:** 72 hours **Result:** 2.26 mg/L **Species:** Algae **Test:** NOEC **Duration:** 72 hours **Result:** 0.76 mg/L **Species:** Algae **Test:** NOEC **Duration:** 3 hours **Result:** 1000 mg/L **Species:** Bacteria **Test method:** OECD 209 **Compartment:** Activated Sludge Plant

D-Glucopyranose, oligomers, decyl octyl glycosides	**Test:** EC50 **Duration:** 72 hours **Result:** 20.71 mg/L **Species:** Algae **Test:** LC50 **Duration:** 96 hours **Result:** 21.00 mg/L **Species:** Fish **Test:** EC50 **Duration:** 72 hours **Result:** 37.00 mg/L **Species:** Algae **Test:** EC50 **Duration:** 48 hours **Result:** 100.00 mg/L **Species:** Daphnia **Test:** EC50 **Duration:** 96 hours **Result:** 151 mg/L **Species:** Crustacean

12.2 Persistence and degradability

Product / Substance	
2-(2- butoxyethoxy)ethanol; diethylene glycol monobutyl ether	**Biodegradability:** Yes **Test:** OECD 301 C **Result:** 80%
Sodium decyl sulphate	**Biodegradability:** Yes **Test:** OECD 301 D **Result:** 80%
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	**Biodegradability:** Yes **Result:** 57%
D-Glucopyranose, oligomers, decyl octyl glycosides	**Biodegradability:** Yes **Test:** OECD 301 E **Result:** 100%

12.3 Bioaccumulative potential

Product / Ingredient name	
2-(2- butoxyethoxy)ethanol; diethylene glycol monobutyl ether	**Potential Bioaccumulation:** No **LogPow:** No data available **BCF:** No data available
Sodium decyl sulphate	**Potential Bioaccumulation:** No data available **LogPow:** 1,72 **BCF:** No data available
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	**Potential Bioaccumulation:** No **LogPow:** No data available **BCF:** No data available

D-Glucopyranose, oligomers, decyl octyl glycosides	**Potential Bioaccumulation:** No data available **LogPow:** 1.77 **BCF:** No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

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

12.6 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.

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

15. REGULATORY INFORMATION

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

Restrictions for application	Restricted to professional users
Sources	Regulation (EU) No 1357/2014 of 18 December 2014 on waste. CLP Regulation (EC) No 1272/2008, as retained and amended in UK law. EC-Regulation 1907/2006 (REACH), as amended by UK REACH Regulations SI 2019/758

15.2 Chemical safety assessment

Chemical safety assessment	Yes

16. OTHER INFORMTION

Full text of H-phrases as mentioned in Section 3	H302, Harmful if swallowed H315, Causes skin irritation H318, Causes serious eye damage H319, Causes serious eye irritation H411, Toxic to aquatic life with long lasting effects H412, Harmful to aquatic life with long lasting effects