Safety Data Sheet

FOMTEC ARC 1x3 Ultra

Revision Date 18/10/2019 **Status** ISSUED BY: Fire Protection Technologies

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

1.1 Product Identifier

Product name: Fomtec ARC 1x3 Ultra

Product no: 12-1322-XX / UFI Code

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	Causes serious eye irritation
Safety statement(s)	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.

2.3 Other hazards

Additional Labelling / VOC	Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
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	5-10%	Eye Irrit. 2, H319	Annex XVII, EU
Sodium decyl sulphate	CAS No.: 142-87-0 EC No.: 205-568-5	3-5%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412	
ethanediol	CAS No.: 107-21-1 EC No.: 203-473-3 Index No.: 603-027-00-1	1-3%	Acute Tox. 4, H302	EU
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	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 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	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 with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the 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
Information to medics	Bring this safety data sheet

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

No specific requirements

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

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids is not allowed in the work area.

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)

8. EXPOSURE CONTROL/PERSONAL PROTECTION

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
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

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
ethanediol	**DNEL:** 35 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Local effects – Workers **DNEL:** 7 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Local effects – General population **DNEL:** 106 mg/kg **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – Workers **DNEL:** 53 mg/kg **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – General population
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
1-Propanaminium, N-(3- aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo, N-(C8-18(even numbered) acyl) derivs., hydroxides	**DNEL:** 0,33 mg/kg **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – Workers **DNEL:** 1,18 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Systemic effects – Workers **DNEL:** 0.17 mg/kg **Route of exposure:** Dermal **Duration:** Long term – Systemic effects – General population **DNEL:** 0.29 mg/m³ **Route of exposure:** Inhalation **Duration:** Long term – Systemic effects – General population **DNEL:** 0.17 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 **Duration:** No data available **PNEC:** 0,11 mg/L **Route of exposure:** Marine water **Duration:** No data available **PNEC:** 0,44 mg/L **Route of exposure:** Marine water sediment **Duration:** No data available **PNEC:** 4.4 mg/kg **Route of exposure:** Freshwater sediment **Duration:** No data available **PNEC:** 0.32 mg/kg **Route of exposure:** Soil **Duration:** No data available
Sodium decyl sulphate	**PNEC:** 0,095 mg/l **Route of exposure:** Freshwater **Duration:** No data available **PNEC:** 0,0095 mg/l **Route of exposure:** Marine water **Duration:** No data available

	PNEC: 1,5 mg/kg **Route of exposure:** Freshwater sediment **Duration:** No data available **PNEC:** 0,15 mg/kg **Route of exposure:** Marine water sediment **Duration:** No data available **PNEC:** 0,2445 mg/kg **Route of exposure:** Soil **Duration:** No data available **PNEC:** 0,086 mg/l **Route of exposure:** Intermittent release **Duration:** No data available
ethanediol	**PNEC:** 1.53 mg/kg **Route of exposure:** Soil **Duration:** No data available **PNEC:** 10 mg/L **Route of exposure:** Freshwater **Duration:** No data available **PNEC:** 1 mg/L **Route of exposure:** Marine water **Duration:** No data available **PNEC:** 3.7 mg/kg **Route of exposure:** Marine water sediment **Duration:** No data available **PNEC:** 37 mg/kg **Route of exposure:** Freshwater sediment **Duration:** No data available
D-Glucopyranose, oligomers, decyl octyl glycosides	**PNEC:** 0,1 mg/l **Route of exposure:** Freshwater **Duration:** No data available **PNEC:** 0,01 mg/l **Route of exposure:** Marine water **Duration:** No data available **PNEC:** 0.487 mg/kg **Route of exposure:** Freshwater sediment **Duration:** No data available **PNEC:** 0.048 mg/kg **Route of exposure:** Marine water sediment **Duration:** No data available
1-Propanaminium, N-(3- aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo, N-(C8-18(even numbered) acyl) derivs., hydroxides	**PNEC:** 0,021 mg/l **Route of exposure:** Freshwater **Duration:** Continuous **PNEC:** 0,00152 mg/L **Route of exposure:** Marine water **Duration:** No data available

PNEC: 0,697 mg/kg
Route of exposure: Marine water sediment
Duration: No data available

PNEC: 0,0414 mg/kg
Route of exposure: Soil
Duration: No data available

PNEC: 6.97 mg/kg
Route of exposure: Freshwater sediment
Duration: No data available

PNEC: 100 mg/l
Route of exposure: Sewage treatment plant
Duration: No data available

8.2 Exposure controls

General recommendations	Smoking, drinking and consumption of food is not allowed in the work area
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 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.
Personal Protective Equipment	Use only CE market protective equipment
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

Form	Liquid
Colour	Pale yellow
Odour	Characteristic
pH	6.1-7.1

Density (g/cm^3)	~1.03
Viscosity	~2400 mPa.s
Melting point	-2°C
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 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

This product is not degraded when used as specified in section 1

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product/Ingredient Name	
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:** 2000.00 mg/kg **Species:** Rat
ethanediol	**Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Oral **Result:** 5840.00 mg/kg **Species:** Rat **Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Dermal **Result:** 9530.00 mg/kg **Species:** Rabbit **Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Oral **Result:** 7712.00 mg/kg **Species:** Rat **Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Dermal **Result:** 3500.00 mg/kg **Species:** Mouse
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:** 2000.00 mg/kg

	Species: Rat
1-Propanaminium, N-(3-aminopropyl)-2- hydroxy-N,Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	**Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Oral **Result:** 2950.00 mg/kg **Species:** Rat **Type of toxicity:** Acute **Test:** LD50 **Route of exposure:** Dermal **Result:** 2000.00 mg/kg **Species:** Rat
Serious eye damage / irritation	Causes serious eye irritation
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

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
ethanediol	**Test:** LC50 **Duration:** 96 hours **Result:** 72860.00 mg/L **Species:** Fish **Test:** EC50 **Duration:** 96 hours **Result:** 6500.00 mg/L **Species:** Algae

	Test: NOEC **Duration:** No data available **Result:** 8590.00 mg/L **Species:** Daphnia
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
1-Propanaminium, N-(3-aminopropyl)-2- hydroxy-N,Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	**Test:** LC50 **Duration:** 96 hours **Result:** 0.23 mg/L **Species:** Fish **Test:** EC50 **Duration:** 48 hours **Result:** 4.00 mg/L **Species:** Daphnia **Test:** NOEC **Duration:** 72 hours **Result:** 0.76 mg/L **Species:** Algae

12.2 Persistence and degradability

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	**Test:** OECD 301 C (Modified MITI Test) **Result:** 80% **Biodegradability:** Yes
Sodium decyl sulphate	**Test:** OECD 301 D (Closed Bottle) **Result:** 80% **Biodegradability:** Yes
ethanediol	**Result:** 90% **Biodegradability:** Yes
D-Glucopyranose, oligomers, decyl octyl glycosides	**Test:** OECD 301 E (Modified OECD Screening Test) **Result:** 100% **Biodegradability:** Yes
1-Propanaminium, N-(3-aminopropyl)-2- hydroxy-N,Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	**Result:** 57% **Biodegradability:** Yes

12.3 Bio accumulative potential

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	**Potential Bioaccumulation:** No
ethanediol	**Potential Bioaccumulation:** No
1-Propanaminium, N-(3-aminopropyl)-2- hydroxy-N,Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	**Potential Bioaccumulation:** No

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

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product is not covered by the regulations on dangerous waste.

EWC code	16 03 06 – Organic wastes other than those mentioned in 16 03 05
Contaminated packaging	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 of MARPOL and the IBC Code

Not applicable

15. REGULATORY INFORMATION

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

Restrictions for application	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.
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). 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.

15.2 Chemical safety assessment

Chemical safety assessment	Yes

16. OTHER INFORMTION

Full list 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 H332, Harmful if inhaled H335, May cause respiratory irritation H336, May cause drowsiness or dizziness H370, Causes damage to organs H371, May cause damage to organs H373, May cause damage to organs through prolonged or repeated exposure H412, Harmful to aquatic life with long lasting effects