

Safety Data Sheet

FOMTEC ARC 1x1 NV

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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 1x1 NV

Product no: 12-1140-01 / UFI Code

Importer / Supplier: Fire Protection Technologies
Address Unit 1/251 Ferntree Gully Road
Mt Waverley, Victoria, 3149 Australia.

Telephone Number 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 Dam. 1; H318, Causes serious eye damage

2.2 Label elements

Hazard Pictogram(s)



Signal word	Danger
Hazard statements	Causes serious eye damage
Safety statement(s)	Prevention: P280, Wear eye protection / protective gloves / protective clothing Response: P305+P351+P338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310, Immediately call a POISON CENTRE / doctor
Hazardous substances	Sodium decyl sulphate D-Glucopyranose, oligomers, decyl octyl glycosides 1-Propanaminium, N-(3- aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts

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
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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Product/Ingredient name	Identifiers	% w/w	Classification	Note
2-(2- butoxyethoxy)ethanol; diethylene glycol monobutyl ether	CAS No.: 112-34-5 EC No.: 203-961-6 REACH No.: 01-2119475104-44 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 REACH No.: 01-2119970328-30-0004	5-10%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 (SCL: 20.00%) Aquatic Chronic 3, H412	
D-Glucopyranose, oligomers, decyl octyl glycosides	CAS No.: 68515-73-1 EC No.: 500-220-1 REACH No.: 01-2119488530-36	5-10%	Eye Dam. 1, H318 (SCL: 10.00%)	
ethanediol	CAS No.: 107-21-1 EC No.: 203-473-3 REACH No.: 01-2119456816-28 Index No.: 603-027-00-1	1-3%	Acute Tox. 4, H302	EU
1-Propanaminium, N-(3-aminopropyl)-2- hydroxy-N,Ndimethyl- 3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides	CAS No.: 68139-30-0 EC No.: 939-455-3 REACH No.: 01-21199722-34-0000	<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	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 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. Seek medical assistance immediately and continue flushing.
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.
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4.3 Indication of any immediate medical attention and special treatment

If exposed or concerned	Get immediate medical advice/attention
Information to medics	Bring this safety data sheet or the label from this product

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

Avoid direct contact with spilled substances
 Avoid inhalation of vapours from spilled material

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, 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

Avoid direct contact with the product.
 Smoking, drinking and consumption of food 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)
Incompatible materials	Strong acids, strong bases, strong oxidizing agents and strong reducing agents

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/m ³): 67,5 Short term exposure limit (15 minutes) (ppm): 15 Short term exposure limit (15 minutes) (mg/m ³): 101,2
ethanediol	Long term exposure limit (8 hours) (ppm): 20(vapour) Long term exposure limit (8 hours) (mg/m ³): 10(particulate)/52(vapour) Short term exposure limit (15 minutes) (ppm): 40 (vapour) Short term exposure limit (15 minutes) (mg/m ³): 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/m³
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

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: 124 mg/m³
Route of exposure: Inhalation

	<p>Duration: Long term – Systemic effects – General population</p> <p>DNEL: 35.7 mg/kg Route of exposure: Oral Duration: Long term – Systemic effects – General population</p> <p>DNEL: 357000 mg/kg Route of exposure: Dermal Duration: Long term – Systemic effects – General population</p> <p>DNEL: 35 mg/m³ Route of exposure: Inhalation Duration: Long term – Local effects – Workers Remarks: Data source ECHA</p> <p>DNEL: 7 mg/m³ Route of exposure: Inhalation Duration: Long term – Local effects – General population Remarks: Data source ECHA</p> <p>DNEL: 106 mg/kg Route of exposure: Dermal Duration: Long term – Systemic effects – Workers Remarks: Data source ECHA</p> <p>DNEL: 53 mg/kg Route of exposure: Dermal Duration: Long term – Systemic effects – General population Remarks: Data source ECHA</p>
ethanediol	
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl-3-sulfo, N-(C8-18(even numbered) acyl) derivs., hydroxides	<p>DNEL: 0,33 mg/kg Route of exposure: Dermal Duration: Long term – Systemic effects – Workers</p> <p>DNEL: 1,18 mg/m³ Route of exposure: Inhalation Duration: Long term – Systemic effects – Workers</p> <p>DNEL: 0.17 mg/kg Route of exposure: Dermal Duration: Long term – Systemic effects – General population</p> <p>DNEL: 0.29 mg/m³ Route of exposure: Inhalation Duration: Long term – Systemic effects – General population</p> <p>DNEL: 0.17 mg/kg Route of exposure: Oral Duration: Long term – Systemic effects – General population</p>
PNEC	
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	<p>PNEC: 1.1 mg/L Route of exposure: Freshwater Duration: No data available</p> <p>PNEC: 0,11 mg/L Route of exposure: Marine water Duration: No data available</p> <p>PNEC: 0,44 mg/L</p>

	<p>Route of exposure: Marine water sediment Duration: No data available</p> <p>PNEC: 4.4 mg/kg Route of exposure: Freshwater sediment Duration: No data available</p> <p>PNEC: 0.32 mg/kg Route of exposure: Soil Duration: No data available</p>
Sodium decyl sulphate	<p>PNEC: 0,095 mg/l Route of exposure: Freshwater Duration: No data available</p> <p>PNEC: 0,0095 mg/l Route of exposure: Marine water Duration: No data available</p> <p>PNEC: 1,5mg/kg Route of exposure: Freshwater sediment Duration: No data available</p> <p>PNEC: 0,15 mg/kg Route of exposure: Marine water sediment Duration: No data available</p> <p>PNEC: 0,2445 mg/kg Route of exposure: Soil Duration: No data available</p>
D-Glucopyranose, oligomers, decyl octyl glycosides	<p>PNEC: 0,086 mg/l Route of exposure: Intermittent release Duration: No data available</p> <p>PNEC: 0,1 mg/l Route of exposure: Freshwater Duration: No data available</p> <p>PNEC: 0,01 mg/l Route of exposure: Marine water Duration: No data available</p> <p>PNEC: 0.487 mg/kg Route of exposure: Freshwater sediment Duration: No data available</p>
ethanediol	<p>PNEC: 0.048 mg/kg Route of exposure: Marine water sediment Duration: No data available</p> <p>PNEC: 1.53 mg/kg Route of exposure: Soil Duration: No data available</p> <p>PNEC: 10 mg/L Route of exposure: Freshwater Duration: No data available</p> <p>PNEC: 1 mg/L</p>

	<p>Route of exposure: Marine water Duration: No data available</p> <p>PNEC: 3.7 mg/kg Route of exposure: Marine water sediment Duration: No data available</p> <p>PNEC: 37 mg/kg Route of exposure: Freshwater sediment Duration: No data available</p>
1-Propanaminium, N-(3- aminopropyl)-2-hydroxy-N,Ndimethyl- 3-sulfo, N-(C8-18(even numbered) acyl) derivs., hydroxides	<p>PNEC: 0,021 mg/l Route of exposure: Freshwater Duration: Continuous</p> <p>PNEC: 0,00152 mg/L Route of exposure: Marine water Duration: No data available</p> <p>PNEC: 0,697 mg/kg Route of exposure: Marine water sediment Duration: No data available</p> <p>PNEC: 0,0414 mg/kg Route of exposure: Soil Duration: No data available</p> <p>PNEC: 6.97 mg/kg Route of exposure: Freshwater sediment Duration: No data available</p> <p>PNEC: 100 mg/l Route of exposure: Sewage treatment plant Duration: No data available</p>

8.2 Exposure controls

General recommendations	Smoking, drinking and consumption of food is not allowed in the work area
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.
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	6.5 – 8.5
Density (g/cm ³)	~1.06
Viscosity	<100 mPa.s
Melting point	-21°C
Solubility in Water	Soluble

9.2 Other information

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

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

ethanediol

Type of toxicity: Acute
Test: LD50
Route of exposure: Oral
Result: 5840.00 mg/kg
Species: Rat

Type of toxicity: Acute
Test: LD50

	<p>Route of exposure: Dermal Result: 9530.00 mg/kg Species: Rabbit</p> <p>Type of toxicity: Acute Test: LD50 Route of exposure: Oral Result: 7712.00 mg/kg Species: Rat</p> <p>Type of toxicity: Acute Test: LD50 Route of exposure: Dermal Result: 3500.00 mg/kg Species: Mouse</p>
1-Propanaminium, N-(3-aminopropyl)-2- hydroxy-N,Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	<p>Type of toxicity: Acute Test: LD50 Route of exposure: Oral Result: 2950.00 mg/kg Species: Rat</p> <p>Type of toxicity: Acute Test: LD50 Route of exposure: Dermal Result: 2000.00 mg/kg Species: Rat</p>
Serious eye damage / irritation	Causes serious eye damage
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	<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>
Sodium decyl sulphate	<p>Test: LC50 Duration: 48 hours Result: 13.00 mg/L Species: Fish</p>

	<p>Test: EC50 Duration: 72 hours Result: 8.64 mg/L Species: Algae</p>
	<p>Test: EC50 Duration: 24 hours Result: >100.00 mg/L Species: Daphnia</p>
D-Glucopyranose, oligomers, decyl octyl glycosides	<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>
	<p>Test: EC50 Duration: 96 hours Result: 151 mg/L Species: Crustacean</p>
ethanediol	<p>Test: LC50 Duration: 96 hours Result: 72860.00 mg/L Species: Fish</p>
	<p>Test: EC50 Duration: 96 hours Result: 6500.00 mg/L Species: Algae</p>
	<p>Test: NOEC Duration: No data available Result: 8590.00 mg/L Species: Daphnia</p>
1-Propanaminium, N-(3-aminopropyl)-2- hydroxy-N,Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	<p>Test: LC50 Duration: 96 hours Result: 0.23 mg/L Species: Fish</p>
	<p>Test: EC50 Duration: 48 hours Result: 4.00 mg/L Species: Daphnia</p>

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 Result: 80% Biodegradability: Yes
Sodium decyl sulphate	Test: OECD 301 D Result: 80% Biodegradability: Yes
D-Glucopyranose, oligomers, decyl octyl glycosides	Test: OECD 301 E Result: 100% Biodegradability: Yes
ethanediol	Result: 90% 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 LogPow: No data available BCF: No data available
Sodium decyl sulphate	Potential Bioaccumulation: No data available LogPow: 1,72 BCF: No data available
D-Glucopyranose, oligomers, decyl octyl glycosides	Potential Bioaccumulation: No data available LogPow: 1.77 BCF: No data available
ethanediol	Potential Bioaccumulation: No LogPow: No data available BCF: No data available
1-Propanaminium, N-(3-aminopropyl)-2- hydroxy-N,Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	Potential Bioaccumulation: No LogPow: No data available 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

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 4 – Irritant (skin irritation and eye damage)

EWC code	16 03 05 – Organic wastes containing dangerous substances
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

No data available

15. REGULATORY INFORMATION

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

Sources	<p>Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.</p> <p>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.</p> <p>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.</p> <p>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)</p> <p>Regulation (EC) 1907/2006 (REACH)</p>
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15.2 Chemical safety assessment

Chemical safety assessment	Yes
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16. OTHER INFORMATION

Full list of H-phrases as mentioned in Section 3

H319, Causes serious eye irritation

H302, Harmful if swallowed

H315, Causes skin irritation

H318, Causes serious eye damage

H412, Harmful to aquatic life with long lasting effects