

# Safety Data Sheet

## FOMTEC ARC 3x6 Ultra

**Issue Date** 17/04/2018

**Status** ISSUED BY: Fire Protection Technologies

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

**1.1 Product Identifier**

<b>Product name:</b>	Fomtec ARC 3x6 Ultra
<b>Article no:</b>	12-3322-XX
<b>Importer / Supplier:</b>	Fire Protection Technologies
<b>Address</b>	Unit 1/251 Ferntree Gully Road Mt Waverley, Victoria, 3149 Australia.
<b>Telephone Number</b>	1300 742 296
<b>Emergency Telephone No.</b>	24 hours 1300 742 296
<b>Emergency Services</b>	Dial 000
<b>SDS Preparer</b>	Fire Protection Technologies
<b>Manufacturer:</b>	Dafo Fomtec AB Garnisongsg. 47 A, Helsingborg Box 683 S-13526 Tyreso Sweden +46 850640500 <a href="mailto:info@fomtec.com">info@fomtec.com</a> <a href="http://www.fomtec.com">www.fomtec.com</a>

### 2. HAZARD IDENTIFICATION

**2.1 Classification of substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Eye Irrit. 2; H319; Calculation method
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**2.2 Label elements**

**Hazard Pictograms (CLP)**



Composition on the label	Sulfuric acid, mono-C8-10-alkyl esters, sodium salts 0,1 -0,5 %, 1-Propanaminium, N-(3- aminopropyl)-2-hydroxy-N,Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts 0,1 -0,5 %
Signal word	Danger
Hazard statements	H319 Causes serious eye damage
Precautionary statements	P264 Wash thoroughly after handling. P280 Wear protective gloves / protective clothing / eye protection / face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice / attention.

### 2.3 Other hazards

PBT / vPvB	The product does not meet the criteria for PBT (persistent / bioaccumulative / toxic) or vPvB (very Persistent / very bioaccumulative).
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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Mixtures

Substance	Identification	Classification
Ethanediol	CAS No.: 107-21-1 EC No.: 203-473-3 Index No.: 603-027-00-1	Acute tox. 4; H302;
Diethylene glycol monobutyl ether	CAS No.: 112-34-5 EC No.: 203-961-6 Index No.: 603-096-00-8	Eye Irrit. 2; H319;
Alkyl polyglycoside	CAS No.: 68515-73-1 EC No.: 500-220-1 REACH Reg. No.: 01-2119488530-36-XXXX	Eye Dam. 1;H318
2-Methylpentane-2,4-diol	CAS No.: 107-41-5 EC No.: 203-489-0 Index No.: 603-053-00-3 REACH Reg. No.: 01-2119539582-35	Eye Irrit. 2; H319 Skin Irrit. 2; H315
Methanol	CAS No.: 67-56-1 EC No.: 200-659-6 Index No.: 603-001-00-X REACH Reg. No.: 01-2119392409-28	Flam. Liq. 2; H225 Acute tox. 3; H331 Acute tox. 3; H311 Acute tox. 3; H301 STOT SE1; H370
Diethylene glycol monomethyl ether	CAS No.: 111-77-3 EC No.: 203-906-6 Index No.: 603-107-00-6 REACH Reg. No.: 01-2119475100-52	Repr. 2;H361d*
Sulfuric acid, mono-C8-10-alkyl esters, sodium salts	CAS No.: 85338-42-7 EC No.: 286-718-7	Skin Irrit. 2; H315 Eye Dam. 1; H318

Substance	Identification	Classification
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 Reg. No.: 01-2119970722-34	Eye Dam. 1; H318 Aquatic Chronic 3; H412

#### 4. FIRST AID MEASURES

##### 4.1 Description of first aid measures

General	Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.
Inhalation	Fresh air and rest. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothing and launder thoroughly before re-use. Wash skin thoroughly with soap and water for several minutes. Get medical attention if any discomfort continues.
Eye contact	Immediately rinse with plenty of lukewarm water for at least 5 minutes. Remove any contact lenses and open eyelids widely. Contact physician if irritation persists.
Ingestion	Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.
Recommended personal protective equipment for first aid responders	No recommendation given

##### 4.2 Most important symptoms and effects, both acute and delayed

General symptoms and effects	After extensive contact, may cause irritation to skin. Causes eye irritation. Ingestion of large quantities may cause nausea, vomiting, dizziness, confusion, lost of consciousness.
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##### 4.3 Indication of any immediate medical attention and special treatment

Medical treatment	Treat Symptomatically
Medical monitoring for delayed effects	No recommendation given
Separate first aid equipment	No recommendation given

#### 5. FIREFIGHTING MEASURES

##### 5.1 Extinguishing media

Suitable extinguishing media	This product is not flammable
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##### 5.2 Special hazards arising from the substance or mixture

Fire and explosion hazards	None
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##### 5.3 Advice for firefighters

Firefighting procedures	Follow the general fire precautions indicated by the workplace
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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 personal precautions, protective equipment and emergency procedures

Personal protection measures      Avoid contact with skin and eyes. Do not breathe vapour. For personal protection, see section 8.

### 6.2 Environmental precautions

Environmental precautionary measures      Prevent discharge of larger quantity to drain. Avoid discharge to the aquatic environment.

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

Clean up      Absorb in vermiculite, dry sand or earth and place into containers. Collect spills to suitable waste containers. Further handling of waste - see section 13.

### 6.4 Reference to other sections

Other instructions      See sections 8 and 13 for information concerning protective equipment and waste treatment methods.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Handling      Avoid contact with skin and eyes. Avoid inhalation of vapours. Wash hands before breaks and before smoking, eating or drinking. Wash hands and contaminated areas with water and soap after finished work. Container must be kept tightly closed.

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

Storage      Store at moderate temperatures in dry, well ventilated area. Keep containers tightly closed. Protect against direct sunlight.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

### 8.1 Control parameters

Substance	Identification	Value	TWA Year
Ethanediol	CAS No.: 107-21-1		
Diethylene glycol monobutyl ether	CAS No.: 112-34-5		
Alkyl polyglycoside	CAS No.: 68515-73-1		
2-Methylpentane-2,4-diol	CAS No.: 107-41-5	TWA (8h): 25 ppm TWA (8h): 123 mg/m <sup>3</sup> <b>OEL short term value</b> Value: 123 mg/m <sup>3</sup>	TWA Year: 2011

### DNEL / PNEC

Substance  
DNEL

Alkyl polyglycoside  
Group: Consumer  
Route of exposure: Long term (repeated) - Inhalation - Systemic effect  
Value: 124 mg/m<sup>3</sup>  
Group: Worker  
Route of exposure: Long term (repeated) - Inhalation - Systemic effect

Substance PNEC	Value: 420 mg/m <sup>3</sup> Group: Worker Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 595000 mg/kg bw/day Group: Consumer Route of exposure: Long term (repeated) - Oral - Systemic effect Value: 35,7 mg/kg bw/day Group: Consumer Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 357000 mg/kg bw/day Diethylene glycol monomethyl ether Comments: Predicted No Effect Concentration 12 mg/L aquatic organisms 100 mg/L microorganisms 1,4 mg/kg terrestrial environment 90 mg/kg predators
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## 8.2 Exposure controls

### Precautionary measures to prevent exposure

Appropriate engineering controls	An eye wash bottle must be available at the work site.
<b>Eye / face protection</b>	
Suitable eye protection	Wear approved, tight fitting safety glasses where splashing is probable.
<b>Hand protection</b>	
Skin-/hand protection, long term contact	In cases of prolonged, repeated or extensive exposure, wear protective gloves.
Suitable gloves type	Rubber or plastic.
<b>Skin protection</b>	
Suitable protective clothing	Use protective clothes in order to avoid skin contact.
<b>Respirator protection</b>	
Respirator protection	In case of inadequate ventilation and work of brief duration, use suitable respirator equipment.
<b>Hygiene / environmental</b>	
Specific hygiene measures	No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Physical state	Clear, yellowish liquid
Colour	Yellowish
Odour	Slight odour

Odour limit	Comments: no information
pH	Status: In delivery state Value: 6,5 – 8,5
Melting point / melting range	Comments: no information
Freezing point	Value: -12 °C
Boiling point / boiling range	Comments: no information
Flash point	Comments: Not relevant.
Evaporation rate	Comments: no information
Flammability (solid, gas)	Not relevant.
Explosion limit	Comments: Product is not explosive
Vapour pressure	Comments: no information
Vapour density	Comments: no information
Relative density	Value: ~ 1,040 g/ml
Solubility	Comments: Soluble in water.
Partition coefficient: n-octanol/water	Comments: no information
Spontaneous combustibility	
Decomposition temperature	Comments: no information.
Viscosity	Value: ~ 2400 mPas Method: Brookfield DV
Explosive properties	Product is not explosive
Oxidising properties	Does not meet the criteria for oxidising

## 9.2 Other information

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Reactivity Stable product under normal conditions of handling and storage.

### 10.2 Chemical stability

Stability Stable product under normal conditions of handling and storage.

### 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions Stable product under normal conditions of handling and storage.

### 10.4 Conditions to avoid

Conditions to avoid Not known under normal conditions of handling and storage.

### 10.5 Incompatible materials

Materials to avoid Alkali earth metals.

### 10.6 Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Substance	Alkyl polyglycoside
Acute toxicity	Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: > 2000 mg/kg Animal test species: Rat Test reference: OECD 401

Substance Acute toxicity	<p>Type of toxicity: Acute            Effect tested: LD50            Route of exposure: Dermal            Value: &gt; 2000 mg/kg            Animal test species: Rabbit            Test reference: OECD 423            2-Methylpentane-2,4-diol            Type of toxicity: Acute            Effect tested: LD50            Route of exposure: Oral            Value: = 3700 mg/kg bw            Animal test species: Rat            Comments: Non-acute toxic.</p>
Substance Acute toxicity	<p>Type of toxicity: Acute            Effect tested: LD50            Route of exposure: Dermal            Value: = 7920 mg/kg bw            Animal test species: Rabbit            Comments: Non-acute toxic.            Diethylene glycol monomethyl ether            Type of toxicity: Acute            Effect tested: LC50            Route of exposure: Oral            Value: = 4000 mg/kg bw            Animal test species: Rat            Comments: Non-acute toxic.</p>
Substance Acute toxicity	<p>Type of toxicity: Acute            Effect tested: LD50            Route of exposure: Dermal            Value: = 6720 mg/kg bw            Animal test species: Rabbit            Comments: Non-acute toxic.            Sulfuric acid, mono-C8-10-alkyl esters, sodium salts            Type of toxicity: Acute            Effect tested: LC50            Route of exposure: Oral            Value: &gt; 2000 mg/kg bw            Animal test species: Rat            Comments: Non-acute toxic.</p>
Substance Acute toxicity	<p>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            Effect tested: LD50            Route of exposure: Oral            Value: = 2950 mg/kg bw            Animal test species: Rat            Test reference: OECD 401            Comments: Non-acute toxic.</p>
	<p>Type of toxicity: Acute            Effect tested: LD50            Route of exposure: Dermal            Value: &gt; 2000 mg/kg bw            Animal test species: Rat</p>

Test reference: OECD 402  
 Comments: Non-acute toxic.

**Other Information regarding health hazards**

Skin contact	In case of prolonged contact with skin, may cause irritation.
Eye contact	Cause serious eye irritation.
Ingestion	In case of ingestion may cause nausea, vomiting, dizziness, confusion, loss of consciousness.
Sensitisation	No known chronic or acute health risks
Mutagenicity	No known chronic or acute health risks.
Carcinogenicity, other information	No known chronic or acute health risks.
Mutagenicity	No known chronic or acute health risks.
Reproductive toxicity	No known chronic or acute health risks.

**Symptoms of exposure**

In case of ingestion	Ingestion of large quantities may cause nausea, vomiting, dizziness, confusion, loss of consciousness.
In case of skin contact	Irritation is possible in case of prolonged contact with skin.
In case of eye contact	Irritation of eyes and mucous membrane.

**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Acute aquatic, fish	Value: > 4500 mg/l Test duration: 96 h Species: Rainbow Trout
Substance	Alkyl polyglycoside
Acute aquatic, fish	Value: ~ 20 mg/l Test duration: 96 hrs Species: Cyprinodon Variegatus Method: OCDE 203
Substance	2-Methylpentane-2,4-diol
Acute aquatic, fish	Toxicity type: Acute Value: = 8510 mg/l Exposure time: 96 hour(s) Species: Gambusia affinis Comments: Not hazardous for environment.
Substance	Methanol
Acute aquatic, fish	Toxicity type: Acute Value: = 15400 mg/l Effect dose concentration : LC50 Exposure time: = 96 hour(s) Species: Lepomis macrochirus Comments: Not hazardous for environment.



Substance	Diethylene glycol monomethyl ether
Acute aquatic, fish	<p>Toxicity type: Acute  Value: = 1000 mg/l  Effect dose concentration : LC50  Exposure time: = 96 h  Species: Oncorhynchus mykiss  Comments: Not hazardous for environment.</p>
Substance	Sulfuric acid, mono-C8-10-alkyl esters, sodium salts
Acute aquatic, fish	<p>Toxicity type: Acute  Value: = 110 mg/l  Effect dose concentration : LC50  Exposure time: 48 hour(s)  Species: Leuciscus idus  Test reference: DIN 38412 T15  Comments: Not hazardous for environment.</p> <p>Toxicity type: Acute  Value: = 240 mg/l  Effect dose concentration : EC50  Species: Daphnia magna  Test reference: DIN 38412 T11  Comments: Not hazardous for environment.</p>
Substance	Alkyl polyglycoside
Acute aquatic, algae	<p>Value: ~ 21 mg/l  Test duration: 72 hrs  Species: Skeletonerna Costatum  Method: ISO 10253</p>
Substance	Methanol
Acute aquatic, algae	<p>Toxicity type: Acute  Value: = 441 mg/l  Effect dose concentration : IC50  Exposure time: = 72 hour(s)  Comments: Not hazardous for environment.</p>
Substance	Diethylene glycol monomethyl ether
Acute aquatic, algae	<p>Toxicity type: Acute  Value: &gt; 500 mg/l  Effect dose concentration : IC50  Exposure time: 72 hour(s)  Species: Scenedesmus subspicatus  Comments: Not hazardous for environment.</p>
Acute aquatic, Daphnia	<p>Value: &gt; 4500 mg/l  Test duration: 24 h  Species: Daphnia Magna</p>
Substance	Alkyl polyglycoside
Acute aquatic, Daphnia	<p>Value: ~ 150 mg/l  Test duration: 48 hrs</p>

Species: Acartia Tonsa  
Method: ISO 14669

Substance 2-Methylpentane-2,4-diol

Acute aquatic, Daphnia  
Toxicity type: Acute  
Value: = 2800 mg/l  
Exposure time: 48 hour(s)  
Species: Ceriodaphnia sp.  
Comments: Not hazardous for environment.

Substance Methanol

Acute aquatic, Daphnia  
Toxicity type: Acute  
Value: = 24500 mg/l  
Effect dose concentration : EC50  
Exposure time: = 48 hour(s)  
Species: D.magna  
Comments: Not hazardous for environment.

Substance Diethylene glycol monomethyl ether

Acute aquatic, Daphnia  
Toxicity type: Acute  
Value: = 1192 mg/l  
Effect dose concentration : EC50  
Exposure time: = 48 hour(s)  
Species: D. magna  
Comments: Not hazardous for environment.

Ecotoxicity The product is not environmentally hazardous to aquatic life.

Aquatic, comments On basis of test data.

## 12.2 Persistence and degradability

Biodegradability Value: ~ 58 %  
Test period: 5 days

Substance Alkyl polyglycoside

Biodegradability Value: ~ 100 %  
Method: OCDE 301E  
Test period: 28 days

Substance 2-Methylpentane-2,4-diol

Biodegradability Value: = 0,02  
Method: BOD5/COD

Substance Methanol

Biodegradability Value: = 99 %  
Method: degradation in 28 days OECD 301D  
Comments: Readily biodegradable.

Substance Diethylene glycol monomethyl ether

Biodegradability Value: = 100 %

	Method: degradation in 7 days OECD 302B Comments: Readily biodegradable.
Substance	Sulfuric acid, mono-C8-10-alkyl esters, sodium salts
Biodegradability	Value: > 60 % Method: OECD 301D Comments: Readily biodegradable. Test period: 10 day(s)
Substance	1-Propanaminium, N-(3- aminopropyl)-2-hydroxy-N,Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts
Biodegradability	Value: = 57 % Method: OECD 306 Test period: = 28 day(s)
Persistence and degradability, comments	The product is expected to be biodegradable.
<b>12.3 bio accumulative potential</b>	
Bioaccumulative potential	Bioaccumulation: Is not expected to be bioaccumulable.
Substance	2-Methylpentane-2,4-diol
Bioconcentration factor (BCF)	Value: < 10 Comments: No bioaccumulation expected.
Substance	Methanol
Bioconcentration factor (BCF)	Value: = 1 Comments: No bioaccumulation expected.
Substance	Diethylene glycol monomethyl ether
Bioconcentration factor (BCF)	Value: = 0,2 Comments: No bioaccumulation expected.

## 12.4 Mobility in soil

Mobility The product contains substances, which are water soluble and may spread in water systems.

## 12.5 Results of PBT and vPvB assessment

PBT assessment results Not Classified as PBT/vPvB by current EU criteria.

## 12.6 Other adverse effects

# 13. DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

Specify the appropriate methods of disposal Dispose of waste and residues in accordance with local authority requirements.

EWC waste code EWC waste code: 160305 organic wastes containing dangerous substances  
Classified as hazardous waste: Yes

**14. TRANSPORT INFORMATION**

Dangerous goods	No
<b>14.1 UN number</b>	
Comments	Not applicable. No information required.
<b>14.2 UN proper shipping name</b>	
Comments	Not applicable. No information required.
<b>14.3 Transport hazard class(es)</b>	
Comments	Not applicable. No information required
<b>14.4 Packing group</b>	
Comments	Not applicable. No information required.
<b>14.5 Environmental hazards</b>	
Comments	Not applicable. No information required.
<b>14.6 Special precautions for user</b>	
<b>14.7 Transport in bulk according to Annex II or MARPOL 73/78 and the IBC Code</b>	
<b>Additional Information</b>	
Additional information	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

**15. REGULATORY INFORMATION**

<b>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
EEC-directive	Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC. Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods. Commission Directive 2012/45/EU adapting for the second time the Annexes to Directive 2008/68/EC of the European Parliament and of the Council on the inland transport of dangerous goods to scientific and technical progress.
Legislation and regulation	Regulation (EC) No 1272/2008 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. Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
<b>15.2 Chemical safety assessment</b>	
Chemical safety assessment performed	Yes

**16. OTHER INFORMTION**

List of relevant H-phrases (Section 2 and 3)	H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H302 Harmful if swallowed.
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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  
 H412 Harmful to aquatic life with long lasting effects.

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]

Eye Irrit. 2; H319; Calculation method

Additional information

Emergency Phone No  
 \*Europe (English, Dutch, French, German, Italian, Spanish) +44 1273 289451  
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