

SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product: Fomtec ARC 3x3 Ultra
Product Use: Appliance protection
Restriction of Use: Refer to Section 15

New Zealand Supplier: **PSL Fire & Safety**
Address: 10 Akatea Rd,
Glendene
Auckland 0602

Telephone: +64 9 818 8048
Fax: +64 9 818 4484
Email: sales@pslfireandsafety.co.nz

Emergency No: 0800 764 766 (National Poison Centre)

Date of SDS: 17 February 2020

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No: Fire Fighting Chemicals – HSR002573

Pictograms



Irritant

Chronic

Signal Word: **Danger**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1E (oral)	H303	May be harmful if swallowed.	Acute Tox. 5
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
6.9A	H372	Causes damage to organs through prolonged or repeated exposure.	STOT RE 1
9.1C	H412	Harmful to aquatic life with long lasting effects.	Aquatic Chronic 3
9.3C	H433	Harmful to terrestrial vertebrates.	-

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fumes, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear personal protective equipment as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
ethanediol	15-25	107-21-1
2-(2butoxyethoxy)ethanol; diethylene Glycol monobutyl ether	5-10	112-34-5
Sodium decyl sulphate	3-5	142-87-0
D-Glucopyranose, oligomers, decyl octyl glycosides	1-3	68515-73-1
1-Propanaminium, N-(3-aminopropyl)-2-hydroxyN,Ndimethyl-3-sulfo-, N-(C8-18(even	1-3	EC: 939-455-3

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.
If on Skin	Remove contaminated clothing and wash before reuse. Wash with plenty of soap and water. Skin cleanser can be used. DO NOT use solvents or thinners. If skin irritation occurs: get medical advice/attention.
If Swallowed	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. Seek medical attention if needed.

If Inhaled

Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion: May be harmful if swallowed.

Inhalation: Not applicable

Skin/Irritation: Causes mild skin irritation. 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. Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Eye: Causes severe eye irritation.

Chronic: Causes damage to organs through repeated or prolonged exposure.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from decomposition products	None.
Suitable Extinguishing media	This product is a fire extinguishing medium.
Precautions for firefighters and special protective clothing	No specific requirements.
HAZCHEM CODE	None Allocated

Section 6. Accidental Release Measures

For personal protection, see section 8.

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.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Do not breathe fumes, mist, vapours or spray.
- Wash hands thoroughly after handling.

- Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms
- Avoid release to the environment.
- Wear personal protective equipment as detailed in Section 8.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- 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)

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA	STEL
	ppm mg/m ³	ppm mg/m ³
Ethylene glycol (vapour and mist) [107-21-1]	Ceiling 50ppm (127mg/m ³)	

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

Engineering Controls

Control is unnecessary if the product is used as intended.

DNEL / PNEC

Product/Ingredient name	DNEL	Route of exposure	Duration
ethanediol	35 mg/m ³	Inhalation	Long term – Local effects - Workers
ethanediol	7 mg/m ³	Inhalation	Long term – Local effects - General population
ethanediol	106 mg/kg	Dermal	Long term – Systemic effects - Workers
ethanediol	53 mg/kg	Dermal	Long term – Systemic effects - General population
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	68 mg/m ³	Inhalation	Long term – Systemic effects - Workers
2-(2-butoxyethoxy)ethanol; diethylene glycol	101,2 mg/m ³	Inhalation	Short term – Local effects - Workers

Monobutyl ether			
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	83mg/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/m3	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/m3	Inhalation	Short term – Systemic effects - Workers
Sodium decyl sulphate	2440 mg/kg	Dermal	Long term – Systemic effects - General population
Sodium decyl sulphate	85 mg/m3	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 Workers	595000 mg/kg	Dermal	Long term – Systemic effects -
D-Glucopyranose, oligomers, decyl octyl glycosides Workers	420 mg / m3	Inhalation	Long term – Systemic effects -
D-Glucopyranose, oligomers, decyl octyl glycosides General population	357000 mg/kg	Dermal	Long term – Systemic effects -
D-Glucopyranose,	124 mg/m3	Inhalation	Long term –

oligomers, decyl octyl glycosides	General population			Systemic effects -
D-Glucopyranose, oligomers, decyl octyl glycosides	35.7 mg/kg	Oral		Long term – Systemic effects -
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		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		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		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		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		Systemic effects - General Population

PNEC

Product/Ingredient name	Exposure	PNEC	Route of exposure	Duration of
ethanediol	1.53 mg/kg	Soil	No data available	
ethanediol	10 mg/L	Freshwater	No data available	
ethanediol	1 mg/L	Marine water	No data available	
ethanediol	3.7 mg/kg	Marine water sediment	No data available	
ethanediol	37 mg/kg	Freshwater sediment	No data available	
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	4.4 mg/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	0,086mg/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	0,01mg/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,	6.97 mg/kg	Freshwater sediment	No data available

Personal Protection Equipment

Eyes	Wear safety glasses with side shields.
Hands	Wear Vinyl/PVC gloves.
Skin	Dedicated work clothing should be worn.
Respiratory	No specific requirements.
General	Smoking, eating and drinking are not allowed in the work premises.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Pale yellow
Odour	Characteristic
Odour Threshold	Not available
pH	6.5 – 8.5
Boiling Point	Not available
Melting Point	-12°C
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Density	~1.04 g/cm ³
Solubility	Soluble in water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	~2400 mPa.s
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	Stable product under normal conditions of handling and storage.
Possibility of hazardous reactions	None known.
Conditions to Avoid	None known.
Incompatible Materials	Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.
Hazardous Decomposition Products	None known.

Section 11 Toxicological Information**Acute Effects:**

Swallowed	May be harmful if swallowed. Mixture rules calculation = LD50 = 3336mg/kg
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes serious eye irritation.
Skin	Causes mild skin irritation.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Cause damage to organs through repeated or prolonged exposure
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. Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Individual component information:**Acute Toxicity:**

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
ethanediol	1670 mg/kg (rat)	9530mg/kg (Rabbit)	-
2-(2butoxyethoxy)ethanol; diethylene Glycol monobutyl ether	>2000mg/kg	>2700 mg/kg	29.00ppm (rat)
Sodium decyl sulphate	1200 mg/kg (rat)	2000mg/kg (rat)	-
D-Glucopyranose, oligomers, decyl octyl glycosides	2000 mg/kg (rat)	2000 mg/kg (rat)	-
1-Propanaminium, N-(3-aminopropyl)-2-hydroxyN,Ndimethyl-3-sulfo-, N-(C8-18(even	2950 mg/kg(rat)	2000 mg/kg (rat)	-

Section 12. Ecotoxicological Information

HSNO Classes: 9.1C = Harmful to aquatic life with long lasting effects.
9.3C = Harmful to terrestrial vertebrates.

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Section 13. Disposal Considerations

Disposal Method: Triple rinse and dispose of according to Local regulations.

Precautions or methods to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Section 15 Regulatory Information

New Zealand:

This substance is classified as hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: Fire Fighting Chemicals – HSR002573

HSNO Classification: 6.1E(oral), 6.3B, 6.4A, 6.9A/B, 9.1C, 9.3C

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L (9.1C)
Emergency Response Plan	1000L (9.1C)
Secondary Containment	1000L (9.1C)
Restriction of Use	Only use for the intended purpose.

Section 16 Other Information

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.

3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact PSL Fire & Safety, if further information is required.

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