

SAFETY DATA SHEET According at 1907/2006/EC (REACH) 453/2010/EC

DAS-F3 FIRE FIGHTING FOAM CLASS A, B / 0,5-1%

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier:

Trade name: VDAS-F3

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Firefighting foam concentrate. For professional use only. Dosage of use: 0,5-3% for use on Class A and B fires (hydrocarbon fires). At concentration recommended the product **IS NOT LISTED AS HAZARDS.**

1.3. Details of the supplier of the safety data sheet:

Supplier:

Qtec Fire Services Pty Ltd.
5 Buttonwood Place Willawong, Brisbane, AUSTRALIA.
4110 Tel: +61 7 3711 7544/ Fax: +61 7 3711 7433
WWW.qtecfire.com.au

1.4. Emergency telephone number:

+61 7 3711 7544 - Hours: 8:00 to 17:00 Monday to Friday (except holidays).

AUSTRALIA

Call the Poisons Information Centre with the MSDS of the product.

PHONE: 13 11 26

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture.

Classification according to Regulation (CE) No.1272/2008:

AUSTRALIA

Local Supplier: Qtec Fire Services Pty Ltd

Telephone: 07 3711 7544 Email: info@qtecfire.com.au

Class	Category	Hazard statements	Hazard Pictograms
Skin sensitization	Category 1	H317 – May cause an allergic skin reaction	€ GHS07
Class	Category 1	H318 – Cause serious eye damage	GHS05

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- 2.1.1. Main physicochemical properties: Not flammable. Not explosive. Not combustion (see Section 9)
- **2.1.2. Stability and reactivity:** May react with strong oxidizers. Don't use containers, pipes or fittings galvanized steel. Avoid using the product on the fire of metals, electrically energized equipment and contact with materials that react with water. Avoid temperatures outside the range prescribed storage (see Section 10).

2.2. Label Elements.

Labelling according to Regulation (EC) No. 1272/2008. The product is labelled according to the CLP regulation.

Hazard pictograms:



Signal word: Danger

Hazardous ingredients:

(2-(2-butoxyethoxy)ethanol), Sulfuric acid, mono- C12-14 (even numbered)-alkyl esters, compds. with triethanolamine, 1-propanamine, N- (3-aminopropyl) -2-hydroxy-N, N-dimethyl-3-sulfonate, N- (C8-18 (even number) acyl) Derivatives., Hydroxides, inner salts; hydroxide (carboxymethyl) dimethyl-3 - [(1-oxododecil) amino] propylammonium; Sodium octyl sulfate; N-(2-hidroxietil)-N-[2-[(1-oxooctil)amino]etil]-β-alanina

Hazard statements:

H317 – May cause an allergic skin reaction.

H318 – Causes serious eye damage.

Precautionary statements:

Prevention:

P261 – Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P333+P313 - If skin irritation or rash occurs: 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.

P310 - Immediately call a POISON CENTER or doctor/physician.

2.3. Others hazards:

Results of PBT and vPvB assessment: Not applicable.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures.

Description: Mixture of the substances listed below.

Dangerous components:

Components	CAS EINECS REACH-No	Danger class CLP-Regulation (EC) 272/2008	Concentration range
(2-(2- butoxyethoxy)ethanol)	112-34-5 203-961-6 01-2119475104-44-xxxx	H319 Eye irrit. Cat. 2	15-25%
Sulfuric acid, mono- C12-14 (even numbered)-alkyl esters, compds. with triethanolamine	139-96-8 939-265-0 	H302 Acute Tox. Cat.4 H315 Skin irritat. Cat. 2 H318 Eye dam. Cat. 1 H412 Acute Tox. Cat 3	1-9%
Sodium octyl sulfate	142-31-4 205-535-5 	H315 Skin irritat. Cat. 2 H318 Eye dam. Cat. 1	≤3%
hydroxide (carboxymethyl) dimethyl-3 - [(1- oxododecil) amino] propylammonium	4292-10-8 224-292-6 01-2119487970-25-0000	H318 Eye dam. Cat. 1 H412 Acute Tox. Cat 3	≤3%
1-propanamine, N- (3- aminopropyl) -2- hydroxy-N, N-dimethyl- 3-sulfonate, N- (C8-18 (even number) acyl) Derivatives., Hydroxides, inner salts	939-455-3 01-2119970722-34-0000	H318 Eye dam. Cat. 1 H412 Acute Tox. Cat 3	≤3%
N-(2-hidroxietil)-N-[2- [(1-oxooctil)amino]etil]- ß-alanina	64265-45-8 264-761-2 	H317 Skin Sensitizer. Cat. 1 H319 Eye irrit. Cat. 2	≤3%

Non-Dangerous components: Surfactants (\leq 3%), Polyglycol (\leq 3%), Saccharides (\leq 20%), corrosion inhibitor (\leq 1%) and Water (\leq 50%)

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures.

If symptoms persist in case of doubt, seek medical advice with the MSDS of the product.

- 4.1.1. After Inhalation: Supply fresh air; get medical advice/attention if you feel unwell.
- **4.1.2. After Skin contact:** May produce an allergic reaction. Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
- **4.1.3. After Eyes contact:** Protect unharmed eye. Rinse the eyes with open eyelids for 10-15 minutes with water. Remove contact lenses, if present and easy to do. Continue rinsing. Then consult an eye specialist immediately.
- **4.1.4. After Swallowing:** Rinse mouth with water. Spit liquid out again. Do not induce vomiting. Seek medical help.
- 4.2. Most important symptoms and effects, both acute and delayed.

May cause an allergic skin reaction. Serious damage to eyes.

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4.3 Indication of any immediate medical attention and special treatment needed.

In the case of doubt or when malaise symptoms persist, seek for medical attention.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media.

Have emergency facilities or elements of action according to the local legislation.

The product is not combustible and does not support any combustion.

Use Water, foam, carbon dioxide or dry chemical.

5.2. Special hazards arising from the substance or mixture.

The combustion or the thermal decomposition of the product can generate carbon dioxide or carbon monoxide. The exposure to combustion products can be dangerous for the health.

5.3. Advice for fire fighters.

According the magnitude of the fire, it can be necessary the use of protection clothes for heat, independent respiratory equipment, gloves, protective goggles or facial mask and boots.

Additional information: Collect contaminated firefighting water separately. It must not enter the sewage system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures.

Wear individual safety protection. Particular danger of slipping on leaked/spilled product.

6.2. Environmental precautions.

Avoid the contamination of the soil, drainage systems and superficial or underground water. In the case of a great spill, inform to the competent authorities according the local legislation.

6.3. Methods and material for containment and cleaning up.

Ensure adequate ventilation. Contain spill. Cover with absorbent material. Collect spilled material and place in a closed and identified container.

6.4. Reference to other sections.

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling.

Comply with current legislation regarding Occupational Health and Safety. Avoid contact with eyes, skin or clothing. Avoid ingestion or inhalation. Avoid spill of the product and maintain remote of water drainage systems. Wash the hands after each use.

7.2. Conditions for safe storage, including any incompatibilities.

Store in original container or tanks designed for product storage, avoiding its evaporation and contamination with strange material. Store at temperatures between -15° C and 50° C. Unsuitable material: Galvanised steel. Store away from foodstuffs. Store away from feed. Refer to national regulations for storing hazardous chemicals.

7.3. Specific end use(s).

Proportioning rate: 0,9-1%

Observe handling instructions for preparing ready-to-use mixtures and for using the solutions.

Avoid use of product on burning metals, electrically energized equipment and contact with water reactive materials.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters.

Components with limit values that require monitoring at the workplace: IOELV (European Union)

CAS EINECS REACH-No	Long-term value	Short –term value
112-34-5 203-961-6 01-2119475104-44-xxxx	10 ppm; 67 mg/m ³	15 ppm; 101 mg/m ³
4292-10-8 224-292-6 01-2119487970-25-0000	44 mg/m³	Not available
939-455-3 01-2119970722-34-0000	18 mg/m³	Not available
	EINECS REACH-No 112-34-5 203-961-6 01-2119475104-44-xxxx 4292-10-8 224-292-6 01-2119487970-25-0000	EINECS REACH-No 112-34-5 203-961-6 01-2119475104-44-xxxx 4292-10-8 224-292-6 01-2119487970-25-0000 939-455-3 18 mg/m³

8.2. Exposure controls.

The usual precautionary measures should be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Do not eat, drink, smoke or sniff while working.

Remove all soiled and contaminated clothing immediately.

Avoid contact with eyes.

After contact with eyes, rinse immediately.

Eye protection:

It is recommended to wear safety glasses with side shields and if risk of splashes and / or liquid projections use face shield (CE Category III).



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Breathing equipment:

Short term filter device (EN 149):

Filter A-P2

Breathing Equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out. E.g. retention and/or local exhaust.

If unintentional release of substance, exceed the occupational exposure limit value: In case of brief exposure or low pollution use a respiratory filter device. In case of intensive or longer exposure use a respiratory protective device that is independent of circulating air.

Protection of hands:

Chemical resistant gloves (EN 374) (CE Category II).



The glove material has to be impermeable and resistant to the product/substance/preparation.

Due to missing test no recommendation to the glove material can be given for the product/preparation/chemical mixture.

Selection of the glove material in consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves:

The selection of suitable gloves depends upon the material, and also upon the quality of the gloves. The degree of protection will vary from manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact penetration time has to be found out by the manufacturer of the protective gloves and has to be observed.

Body protection:

Protective work clothing.

SECTION 9: PHISICAL AND CHEMICAL PROPERTIES

9.1. Physical and chemical properties.

Appearance: Yellow liquid. Odour: Characteristic.

Odour threshold: Not determined. pH-value at 20°C: 7,5 ± 0,5 Freezing point: <-15°C Melting range: Not determined

Boiling range: 90-110° C Flash point: Not applicable.

Flammability: Product is not flammable.

Decomposition temperature: Not determinate.

Self ignition temperature: Product is not self-igniting.

Danger of explosion: Product does not present an explosion hazard.

Vapour pressure: Not determinate. Density at 20°C: 1,09 ± 0,01g/cm³

Solubility in / Miscibility in Water: Fully miscible.

Viscosity (mPa's): 20°C 375s-1 <50

9.2. Additional Information: No further relevant information availed.

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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

It can react with strong oxidants.

10.2. Chemical stability:

Stable in common environmental conditions and in the above-mentioned range of temperature during its storage and manipulation.

10.3. Possibility of hazardous reactions:

No dangerous reactions known.

10.4. Conditions to avoid:

Temperatures: <-15°C, >+50°C.

10.5. Incompatible materials:

Not use containers, pipes or accessories of galvanized steel. Avoid use of products on burning metals, electrically-energized equipment and contact with strong oxidants and water reactive materials.

10.6. Hazardous decomposition products:

No hazardous decomposition products if instructions for storage and handling are followed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects: Data no available for the product itself:

Components	ORAL - OECD 401 LD50	DERMAL - OECD 402 LD50	INHALATION IRT
(2-(2- butoxyethoxy)ethanol)	2410 mg/kg bw (rat)	2764 mg/kg bw (rabbit)	>29ppm
Sulfuric acid, mono- C12-14 (even numbered)-alkyl esters, compds. with triethanolamine	>200 mg/kg (rat)	not available	not available
Sodium octyl sulfate	>2000 mg/kg (rat)	not available	not available
hydroxide (carboxymethyl) dimethyl- 3 - [(1-oxododecil) amino] propylammonium	>5000 mg/kg (rat)	>5000 mg/kg (rat)	not available
1-propanamine, N- (3- aminopropyl) -2-hydroxy- N, N-dimethyl-3- sulfonate, N- (C8-18 (even number) acyl) Derivatives., Hydroxides, inner salts	>2950 mg/kg (rat)	>2000 mg/kg (rat)	not available
N-(2-hidroxietil)-N-[2-[(1- oxooctil)amino]etil]-ß- alanina	>2000 mg/kg (rat)	>2000 mg/kg (rat)	not available

a) Acute toxicity: Data no available for the product itself. Based on available data, the classification criteria are not met.

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b) Irritation: Data no available for the product itself. Based on available data, classified as "H318 - Causes serious eye damage" according to EC Regulation 1272/2008 (CLP).

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c) Sensitisation: Data no available for the product itself. Based on available data, classified as "H317 - May produce an allergic reaction"

EC₅₀, mg/l 48h

- d) Repeated dose toxicity: Data no available for the product itself. Based on available data, the classification criteria are not met.
- e) Carcinogenicity: Based on available data, the classification criteria are not met.

LC₅₀, mg/l 96h

- f) Mutagen city: Based on available data, the classification criteria are not met.
- g) Toxicity for reproduction: Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Components

<u> </u>			
(2-(2- butoxyethoxy)ethanol)	1300 Fishes	>4950 Daphnia	>100 Seaweed (96h)
Sulfuric acid, mono- C12-14 (even	00 57.1		
numbered)-alkyl esters, compds. with triethanolamine	29 Fishes	7,1 Daphnia	9,3 Seaweed (72h)
Sodium octyl sulfate	>100 Fishes	>100 Daphnia	511 Seaweed (72h)
hydroxide (carboxymethyl) dimethyl- 3 - [(1-oxododecil) amino] propylammonium	1,11 Fishes	1,9 Daphnia	2,4 Seaweed (72h)
1-propanamine, N- (3- aminopropyl) -2-hydroxy- N, N-dimethyl-3- sulfonate, N- (C8-18 (even number) acyl) Derivatives., Hydroxides, inner salts	2,1-2,66 Fishes	4 Daphnia	2,26 Seaweed (72h)
N-(2-hidroxietil)-N-[2-[(1- oxooctil)amino]etil]-ß- alanina	> 100 Fishes	>100 Daphnia	128 Seaweed (72h)
oxooctil)amino]etil]-ß-		>100 Daphnia	128 Seaweed (72h)
oxooctil)amino]etil]-ß- alanina		>100 Daphnia DBO ₂₈ (28 days)	128 Seaweed (72h)
oxooctil)amino]etil]-ß- alanina 12.2. Persistence and degrad	lability.	<u> </u>	128 Seaweed (72h)
oxooctil)amino]etil]-ß- alanina 12.2. Persistence and degrad Components (2-(2-butoxyethoxy)ethanol Sulfuric acid, mono-	lability.	DBO ₂₈ (28 days)	128 Seaweed (72h)
oxooctil)amino]etil]-ß- alanina 12.2. Persistence and degrad Components (2-(2-butoxyethoxy)ethanol Sulfuric acid, mono- C12-14 (even	lability.	DBO ₂₈ (28 days) >80%	128 Seaweed (72h)
oxooctil)amino]etil]-ß- alanina 12.2. Persistence and degrad Components (2-(2-butoxyethoxy)ethanol Sulfuric acid, mono-	lability.	DBO ₂₈ (28 days)	128 Seaweed (72h)
oxooctil)amino]etil]-ß- alanina 12.2. Persistence and degrad Components (2-(2-butoxyethoxy)ethanol Sulfuric acid, mono- C12-14 (even numbered)-alkyl esters, compds. with	lability.	DBO ₂₈ (28 days) >80%	128 Seaweed (72h)
oxooctil)amino]etil]-ß- alanina 12.2. Persistence and degrad Components (2-(2-butoxyethoxy)ethanol Sulfuric acid, mono- C12-14 (even numbered)-alkyl esters, compds. with triethanolamine	lability.	DBO ₂₈ (28 days) >80%	128 Seaweed (72h)
oxooctil)amino]etil]-ß- alanina 12.2. Persistence and degrad Components (2-(2-butoxyethoxy)ethanol Sulfuric acid, mono- C12-14 (even numbered)-alkyl esters, compds. with triethanolamine Sodium octyl sulfate hydroxide (carboxymethyl) dimethyl-3 - [(1-oxododecil) and	nino] opyl) nber) inner	DBO ₂₈ (28 days) >80% 91%	128 Seaweed (72h)

12.3. Bio accumulative potential.

Data no available.

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12.4. Mobility in soil.

Data no available.

12.5. Results of PBT and vPvB assessment.

Not applicable.

12.6. Others adverse effects.

The spill of the product will create copious quantities of foam. In the event of large spillage, let appropriate authorities know.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods.

Recommendations:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be recycled or disposed of according to the regulations. Waste has to be classified according to the European Waste catalogue based on the identification of the waste generating source.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water; if necessary, with cleansing agents.

SECTION 14: TRANSPORT INFORMATION

- ADR (Road): Non-dangerous.

- RID (Railway): Non-dangerous.

- IMDG (Sea): Non-dangerous.

- IATA (Airplane): Non-dangerous.

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SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 1272/2008.

Must comply with local legislation on occupational risk prevention and environment.

15.2. Chemical safety assessment.

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

16.1. Revisions.

Current Version: 6a

Replaces version dated: 10/11/2016

Revision date: 10/17/2017

Reasons for amendments: Product Trade Name Change.

16.2. Legislation on Safety materials sheets.

This Safety Data Sheet has been developed according at Regulation (EC) No 1272/2008.

16.3. Relevant phrases

H317 – May cause an allergic skin reaction.

H318 – Causes serious eye damage.

P261 – Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P333+P313 - If skin irritation or rash occurs: 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.

P310 - Immediately call a POISON CENTER or doctor/physician.

16.4. Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

16.5. Sources

http://echa.europa.eu http://eur-lex.europa.eu

Minimal training is recommended in the prevention of occupational hazards to personnel who will handle this product, in order to facilitate the understanding and interpretation of this safety data sheet and product labeling.

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