FlameStop

# SAFETY DATA SHEET

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## SECTION 1 - IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

### PRODUCT IDENTIFIER:

# FLAMESTOP PREMIUM 3% AFFF FOAM CONCENTRATE

### OTHER MEANS OF IDENTIFICATION:

**EK315** PREMIUM 3% AFFF FOAM 20L DRUM

**EF30315DR PREMIUM 3% AFFF FOAM 600ML BOTTLE**

### RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST:

| | |
|---|---|
| **Use of substance / mixture:** | fire extinguishing agent |

### DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:

| | |
|---|---|
| **Supplier:** | FlameStop |
| **Street:** | 16 Davis Road |
| **Postal code/city:** | Wetherill Park, NSW. 2164 |
| **Country:** | Australia |
| **Telephone:** | +61 2 9725 3322 - 7am-4:30pm AET Mon-Fri |
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| **Dept. responsible for information:** | Compliance |

### EMERGENCY CONTACT NUMBER: +61 425 342 729

### PREPARED IN ACCORDANCE WITH THE NATIONAL CODE OF PRACTICE FOR THE PREPARATION OF MATERIAL SAFETY DATA SHEETS 2ND EDITION [NOHSC:2011(2003)]

## SECTION 2 - HAZARD(S) IDENTIFICATION

### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

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

Classidied as dangerous - Specific Target Organ Toxicity (Repeated Exposure) - Category 2

**Classification according to the the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th Edition)**

Not classified as dangerous goods

### LABEL ELEMENTS:

| | |
|---|---|
| **Hazard pictograms** | |
| **Pictogram code** | GHS08 Health Hazard |
| **Signal word** | **WARNING** |
| **Hazard statements** | |
| **Physical Hazards** | |
| **Health Hazards** | **H373.8** May cause damage to kidneys through prolonged or repeated exposure if swallowed. |
| **Environmental Hazards** | |
| **Combinations** | |
| **Precautionary statements** | |
| **General** | |
| **Prevention** | **P262** Do not get in eyes, on skin, or on clothing.<br>**P280** Wear protective gloves/protective clothing/eye protection/face protection. |
| **Response** | **P301+P330+P331** IF SWALLOWED: rinse mouth. Do NOT induce vomiting.<br>**P303+P361+P353** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| **Storage** | |
| **Disposal** | |

### OTHER HAZARDS

The product contains non-biodegradable fluorosurfactants.

Can harm the aquatic fauna when entering surface waters.

Can harm the bacteria population in waste water treatment plants when entering the sewerage system.

Breathing is not possible whilst submerged in the foam. Take care when spraying people!

## SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

### MIXTURE INGREDIENTS

| Ingredient (Designation) | CAS No. | Percentage of Ingredients |
|---|---|---|
| **1,2 Ethandiol** | 107-21-1 | <20% |
| **2-(2-Butoxyethoxy) Ethanol** | 112-34-5 | <10% |
| **Fluorosurfactant** | | <5% |

## SECTION 4: FIRST AID MEASURES

### DESCRIPTION OF FIRST AID MEASURES:

**General information**

Remove contaminated, saturated clothing immediately. Wash thoroughly the body (shower or bath). Observe risk of aspiration if vomiting occurs. When in doubt or if symptoms are observed, get medical advice.

**Following inhalation**

Provide fresh air. Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

**In case of skin contact**

Wash immediately with: Water

**After eye contact**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

**After ingestion**

Do NOT induce vomiting.

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

### MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE, DELAYED AND AGGREVATED

Drowsiness

Nausea

Gastrointestinal complaints

### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

If unconscious place in recovery position and seek medical advice.

IF SWALLOWED: Immediately call a POISON CENTER/doctor/....

## SECTION 5: FIREFIGHTING MEASURES

### EXTINGUISHING MEDIA

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

### SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

### ADVICE FOR FIREFIGHTERS

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**Appropriate personal protective equipment for fire fighters:**

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) and full protective clothing to prevent exposure to vapours, fumes or products of combustion. Avoid eye and skin contact.

**Hazchem code:**

No Hazchem Code issued to these articles. No HIN issued under RID and ADR.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

Provide adequate ventilation.

### ENVIRONMENTAL PRECAUTIONS

Cover drains. Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

### METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Take up mechanically, placing in appropriate containers for disposal.

Treat the recovered material as prescribed in the section on waste disposal.

Suitable material for taking up:

- Sand
- Sawdust
- Chemical binding agents, containing acids

### REFERENCES TO OTHER SECTIONS

Safe handling: see section 7

Personal protection equipment: see section 8

## SECTION 7 - HANDLING AND STORAGE

### PRECAUTIONS FOR SAFE HANDLING

**Avoid**

- Skin contact
- Eye contact

Wear personal protection equipment (see chapter 8).

**Measures to prevent fire**

The product is not

- Oxidising
- Combustible
- Flammable
- Explosive
- Highly flammable

No special fire protection measures are necessary

## CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

**Technical measures and storage conditions**

Do not store at temperatures above: +50°C

**Requirements for storage rooms and vessels**

Suitable container/equipment material

- Refined steel
- Polyethylene (PE)
- Unsuitable container/equipment material
- Aluminium
- Light metal
- Copper
- Zinc
- Alloy, containing copper
- Alloy, contains light metal
- Iron.
- Steel

**Hints on joint storage**

Storage class

12: Non-combustible liquids

## SPECIFIC END USE(S)

Fire-extinguishing foams based on synthetic surfactants

Do not use for cleaning purposes.

**Recommendation**

Observe technical data sheet.

## CONTROL PARAMETERS / OCCUPATIONAL EXPOSURE LIMIT VALUES

**Substance name: 2-(2-Butoxyethoxy)ethanol**

CAS No.: 112-34-5

EC No.: 203-961-6

**United Kingdom**

long-term occupational exposure limit value: 10 ppm; Limit value type (country of origin): TWA (EN)

short-term occupational exposure limit value: 15 ppm; Limit value type (country of origin): STEL (EN)

peak limitation: ---; Limit value type (country of origin): Ceil (EN)

**European Union**

long-term occupational exposure limit value: 10 ppm; Limit value type (country of origin): TWA (EC)

short-term occupational exposure limit value: 15 ppm; Limit value type (country of origin): STEL (EC)

peak limitation: ---; Limit value type (country of origin): Ceil (EC)

**Germany**

long-term occupational exposure limit value: 10 ppm; Limit value type (country of origin): AGW (DE)

short-term occupational exposure limit value: 15 ppm; Limit value type (country of origin): Peak (DE)

peak limitation: ---; Limit value type (country of origin): Ceil (DE)

**Substance name: 1,2-Ethandiol**

CAS No.: 107-21-1

EC No.: 203-473-3

**United Kingdom**

long-term occupational exposure limit value: 20 ppm; Limit value type (country of origin): TWA (EN)

short-term occupational exposure limit value: 40 ppm; Limit value type (country of origin): STEL (EN)

peak limitation: ---; Limit value type (country of origin): Ceil (EN)

**European Union**

long-term occupational exposure limit value: 20 ppm; Limit value type (country of origin): TWA (EC)

short-term occupational exposure limit value: 40 ppm; Limit value type (country of origin): STEL (EC)

peak limitation: ---; Limit value type (country of origin): Ceil (EC)

**Germany**

long-term occupational exposure limit value: 10 ppm; Limit value type (country of origin): AGW (DE)

short-term occupational exposure limit value: 20 ppm; Limit value type (country of origin): Peak (DE)

peak limitation: ---; Limit value type (country of origin): Ceil (DE)

## EXPOSURE CONTROLS

**Advices on general occupational hygiene**

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Avoid contact with skin, eyes and clothes.

Remove contaminated, saturated clothing.

Wash contaminated clothing prior to re-use.

Wash hands before breaks and after work.

Apply skin care products after work.

## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION (CONTINUED)

**Eye/face protection**

Suitable eye protection

- Eye glasses with side protection
- goggles
- Face protection shield

Recommended eye protection articles

- DIN EN 166

**Hand protection**

Suitable gloves type

- Gloves with long cuffs

Suitable material

- NBR (Nitrile rubber)
- Butyl caoutchouc (butyl rubber)

Breakthrough time (maximum wearing time)

- 120 min.

Recommended glove articles

- DIN EN 374

**Body protection**

Body protection: not required.

**Respiratory protection**

Usually no personal respirative protection necessary.

**Environmetnal exposure controls**

Store concentrate according to national regulations (VAwS).

Do not let the concentrate get into the environment.

If possible, hold back the application solution and dispose of after use.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| **Appearance**<br>**- Physical state:**<br>**- Colour:** | <br>Liquid<br>Yellow / Brown | |
| **pH (at 20°C):** | 6.5 - 8.5 | DIN 19268 |
| **Density (at 20°C)** | 1,010 - 1,050 g/ml | DIN 12791 |
| **Kinematic viscosity (at 20°C)** | < 10 mm²/s | DIN 51562 Newton |
| **Kinematic viscosity (at -15°C)** | < 30 mm²/s | DIN 51562 Newton |
| **Solidification point:** | -15°C | DIN ISO 3016 |
| **Initial boiling point and boiling range** | >100°C | DIN 51751 |
| **Water solubility (g/L)** | completely miscible | OECD 105 |
| **Flash point** | No flash point up to 100°C | |

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

### PHYSICAL HAZARDS

Breathing is not possible whilst submerged in the foam. Take care when spraying people!

### OTHER INFORMATION

No information available

## SECTION 10 - STABILITY AND REACTIVITY

### REACTIVITY

**Materials to avoid**

- Alkali (lye), concentrated
- Alkali metals
- Acid, concentrated
- Oxidising agent, strong
- Reducing agent, strong
- Acid halides

### CHEMICAL STABILITY

No special measures are necessary. Stable under normal ambient storage and handling conditions.

### POSSIBILITY OF HAZARDOUS REACTIONS

None.

### CONDITIONS TO AVOID

Do not store at temperatures above: +50°C

### INCOMPATIBLE MATERIALS

See section 7. No additional measures necessary.

### HAZARDOUS DECOMPOSITION PRODUCTS

Pyrolysis products, containing fluorine

Fluorinated hydrocarbons

Hydrofluoric acid

## SECTION 11 - TOXILOGICAL INFORMATION

# MIXTURE RELATED INFORMATION

Test was carried out with a similar preparation / mixture

**Non-human toxicological data**

Acute oral toxicity

| | | |
|---|---|---|
| **LD50** | >2000mg/kg | The acute oral toxicity is corresponding to GHS-category 5. |
| **Species** | Rat | |
| **Method** | OECD 420 | Test was carried out with a similar formulation. |

**Acute dermal toxicity**

The product has not been tested.

**Acute inhalation toxicity**

The product has not been tested.

**Irritant and corrosive effects**

**Skin corrosion/irritation**

Not an irritant.

The product has not been tested.

Test was carried out with a similar preparation/mixture.

**Eye damage/irritation**

The product has not been tested.

Test was carried out with a similar preparation/mixture.

**Irritation to respiratory tract**

The product has not been tested.

**Respiratory or skin sensitisation**

The product has not been tested.

**Repeated dose toxicity**

The product has not been tested.

**Carcinogenicity**

The product has not been tested.

**In vivo mutagenicity/genotoxicity**

The product has not been tested.

Reproductive toxicity

The product has not been tested.

## SECTION 12 - ECOLOGICAL INFORMATION

### TOXICITY

| Acute (short-term fish toxicity) | |
|---|---|
| **Effective dose -** LC50 ~5100mg/L | |
| **Exposure time** | 96h |
| **Species** | Leuciscus idus (golden orfe) |
| **Method** | OECD 203 |

| Acute (short-term toxicity to crustacea) | |
|---|---|
| **Effective dose -** EC50 ~600mg/L | |
| **Exposure time** | 48h |
| **Species** | Daphnia magna (Big water flea) |
| **Method** | OECD 202 |

| Acute (short-term) toxicity to aquatic algae and cyanobacteria | |
|---|---|
| **Effective dose -** EC50 ~150mg/L | |
| **Exposure time** | 72h |
| **Species** | Scenedesmus subspicatus |
| **Method** | OECD 201 |

| Effects in sewage plants | |
|---|---|
| **Method -** Respiratory inhibition of municipal activated sludge. | |
| **7500 mg/L** | 100% concentration, dilution >133 |
| **250000 mg/L** | 3% concentration, dilution >4 |
| The product contains non-biodegradable fluorosurfactants. Some of the components are poorly biodegradable. | |

**Remark**

Observe local regulations concerning effluent treatment.
Special pre-treatments are necessary.

### PERSISTENCE AND DEGRADABILITY

**Biodegration**

Readily biodegradable (according to OECD criteria).

Additional information

The product contains non-biodegradable fluorosurfactants.

Degradation rate (%): ~ 97%

Test durarion: 28 d

Analytical method: BOD (% of COD).

Method: OECD 302B/ ISO 9888/ EEC 92/69/V, C.9

type: Aerobic biological treatment

| Chemical Oxygen Demand (COD) | |
|---|---|
| **~ 570000 mg*02/L** | 100% concentration, method: DIN EN 38409-H41-1 |
| **~ 17100 mg*02/L** | 3% concentration, method: DIN EN 38409-H41-1 |

| Biochemical Oxygen Demand (BOD) | |
|---|---|
| **~ 235000 mg*02/L** | 100% concentration, method: DIN EN 1899-1, duration 5 days |
| **~ 7050 mg*02/L** | 3% concentration, method: DIN EN 1899-1, duration 5 days |

**BOD5/COD ratio**

41%

## SECTION 12 - ECOLOGICAL INFORMATION

### BIOACCUMULATIVE POTENTIAL

1,2-ETHANDIOL: No indication of bioaccumulation potential.

2-(2-BUTOXYETHOXY)ETHANOL: No indication of bioaccumulation potential.

FLUOROSURFACTANT: No indication of bioaccumulation potential.

### MOBILITY IN SOIL

If product enters soil, it will be mobile and may contaminate groundwater.

### MOBILITY IN SOIL

1,2-ETHANDIOL: This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

2-(2-BUTOXYETHOXY)ETHANOL: This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

FLUOROSURFACTANT: This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

### OTHER ADVERSE EFFECTS

The product contains non-biodegradable fluorosurfactants.

## SECTION 13 - DISPOSABLE CONSIDERATIONS

### DISPOSABLE METHODS

Dispose of waste according to applicable legislation.

### LIST OF PROPOSED WASTE CODES/WASTE DESIGNATIONS IN ACCORDANCE WITH EWC

**Waste code product**

| | |
|---|---|
| 16 | WASTES NOT OTHERWISE SPECIFIED IN THE LIST |
| 1603 | off-specification batches and unused products |
| 160305* | organic wastes containing dangerous substances |

**Waste code packaging**

| | |
|---|---|
| 15 | WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED |
| 1501 | Packaging (including separately collected municipal packaging waste) |
| 150110* | packaging containing residues of or contaminated by dangerous substances |

### REMARK

Delivery to an approved waste disposal company.

Send to a hazardous waste incinerator facility under observation of official regulations.

Dispose according to legislation.

## SECTION 14 - TRANSPORT INFORMATION

**Land transport (ADR/RID)**

Not classified for this carrier.

**Marine transport (IMDG)**

Not classified for this carrier.

**Air transport (ICAO)**

Not classified for this carrier.

## SECTION 15 - REGULATORY INFORMATION

### SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia. Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**EU legislation**

**Regulation (EC) No. 2037/2000 concerning materials, which cause damage to the ozone layer.**

not applicable

**Regulation (EC) No. 304/2003 of the European parliament and of the council concerning the export and import of dangerous chemicals**

not applicable

**Directive 96/59/EC (PCB-guideline)**

not applicable

**Regulation (EC) No. 648/2004 (Detergents regulation)**

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

**Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).**

Volatile organic compounds (VOC) content in percent by weight: max. 10

**Regulation (EC) No. 842/2006 on certain fluorinated greenhouse gases**

not applicable

**National regulations**

Störfallverordnung

Not subject to StörfallVO.

**Water hazard class (WGK)**

slightly hazardous to water (WGK 1)

Classification according to VwVwS, Annex 4.

**annex Chemikalien-Verbotsverordnung (ChemVerbotsV)**

not applicable

## SECTION 16 - OTHER INFORMATION

### KEY LITERATURE REFERENCES AND SOURCES

Classification in accordance with the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)].

This Safety Data Sheet where necessary has been established in accordance with the applicable European Union legislation and has used calculation methods of regulation (EC) 1272/2008 CLP / (EC) 1999/45 DPD.

Standard for the Uniform Scheduling of Medicines and Poisons. (SUSMP)

Australian Inventory of Chemical Substances (AICS)

Australian Code for the Transport of Dangerous Goods by Road & Rail (2020, 7TH Edition 7.7)

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Workplace exposure standards for airborne contaminants, Safe work Australia.

International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

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**Please refer to our internet website for more information: www.flamestop.com.au**

**SDS sheets are available to download in the downloads section of our website.**

**For contact information please go to page 1 of this SDS.**

### END OF SDS.