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

### 1.1 Product identifier.

| | |
|---|---|
| Product form: | Mixture |
| Product name: | Fluorine Free Foam |
| Type of product: | Extinguishing agents |
| Product group: | Fire extinguisher |

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

#### 1.2.1 Relevant identified uses.

| | |
|---|---|
| Main use category: | Industrial, professional, and residential. |
| Use of substance/ mixture: | Extinguishing agents. |
| Function or use category: | Fire extinguisher. |

#### 1.2.2 Uses advised against.

No additional information available.

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

| | |
|---|---|
| Supplier: | CheckFire Ltd. |
| Address: | Sir Alfred Owen Way<br>Caerphilly, CF83 1NL, South Wales |
| Company telephone: | +44(0)2920 868 333 8am-4:45pm EST Monday- Friday |
| Website/ Email: | www.checkfire.co.uk sales@checkfire.co.uk |
| Dept Responsible for information: | Compliance |

### 1.4 Emergency telephone number:

| | |
|---|---|
| Emergency telephone number: | +44 (0) 2920 868 333 8am – 4:45pm UK<br>Mon- Friday |

## SECTION 2 : HAZARDS IDENTIFICATION:

### 2.1 Classification of substance or mixture Classification according to Regulation (EC) No. 1272/2008 (CLP)

**Adverse physicochemical, human health and environmental effects.**

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practices.

### 2.2 Label elements

**Labelling according to Regulation (EC) No. 1272/2008 (CLP)**

EUH-statements

Hazard Pictogram, Singal words:



Pictogram Code: GHS05
Signal Word: Danger

| Hazard Statements | |
|---|---|
| Physical Hazards | Warning – Contains gas under pressure |
| Health Hazards | Danger – Causes serious eye Damage<br>Danger – Causes Skin Irritation |
| Environmental Hazards | Does not meet the criteria of classification as dangerous for the environment. |
| Combinations | None |
| **Precautionary Statements** | |
| General | P101 If medical advice is needed, have product container or label at hand |
| Prevention | P264: Wash hands thoroughly after handling P280: wear eye protection face protection. |
| 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.<br><br>P337+P313: If eyes irritation persists: Get medical advice / attention. |

### 2.3 Other hazards

The product does not contain any PBT, vPvB, SVHC or endocrine disruptors in percentage greater than 0.1% in accordance with REACHAnnex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1%

# SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS:

### 3.1 Substances
Not applicable

### 3.2 Mixtures

| Name | Product Identifier | % | Classification according to Regulation (EC) No 1272/2008 (CLP) |
|---|---|---|---|
| Water | CAS No. 7732-18-5<br>EC No. 231-791-2 | 65 | - |
| Diethylene Glycol Butyl Ether | CAS No. 112-34-5<br>EC No. 203-961-6 | 15 | Eye Irritant 2; H319 |
| Ethylene Glycol | CAS No. 107-21-1<br>EC No. 203-473-3 | 10 | Acute Tox 4; H302 |
| Sodium Octyl Sulfate | CAS No. 142-31-4<br>EC No. 205-535-5 | 10 | Skin Irritant 2: Eye Damage 1; H315, H318 |

This product does not contain substances classified as hazardous according to the European parliament and council regulation (EC) no 1272/2008 of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing directive 67/548/EEC and 1999/45/EC, amending regulation (EC) no 1907/2006 in the concentration ranges specified.

Section 16 stated the importance of H-phrases and symbols.

# SECTION 4: FIRST AID MEASURES:

### 4.1 Description of first aid measures
First aid measures after inhalation: Remove the victim to fresh air and keep comfortable for breathing. Consult a doctor/medical service if you feel unwell.

| | |
|---|---|
| First aid measures after skin exposure: | Wash skin with plenty of water. Consult a doctor/medical professional if irritation persists. |
| First aid measures after eye contact: | Wash immediately with plenty of water for at least 20 minutes, opening the eyelids fully. Consult an eye specialist. |
| First aid measures after Ingestion: | Do not induce vomiting. Seek medical advice if necessary. |

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media
No additional information available.

### 5.2 Special hazards arising from the substance or mixture.
Hazardous decomposition products may include Carbon Monoxide, Carbon Dioxide, and other toxic gases.

### 5.3 Advice for fire fighters

| | |
|---|---|
| Precautionary measures fire: | Evacuate area. |
| Firefighting instructions: | Exercise caution when fighting any chemical fire. |
| Protection during firefighting: | Do not attempt to act without suitable protective equipment. Self-contained breathing apparatus. |

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

| | |
|---|---|
| General measures**:** | Do not handle until all safety precautions have been read and understood. |

#### 6.1.1 For non-emergency personnel

| | |
|---|---|
| Protective equipment: | Wear appropriate personal protective equipment. |
| Emergency Procedures: | Ventilate spillage area. |

#### 6.1.2 For emergency responders

| | |
|---|---|
| Protective equipment: | Do not attempt to act without suitable protective equipment. Provide adequate ventilation. Avoid contact with eyes. For further information refer to section 8. “Exposure controls/ personal protection”. |

### 6.2 Environmental precautions

Avoid release to the environment. In the event of a serious pollution event notify the appropriate administrative authority. Collect all waste in suitable and labelled containers and dispose of it according to local legislation.

### 6.3 Methods and materials for containment and cleaning up.

| | |
|---|---|
| Method for cleaning up: | Take up liquid into absorbent material. This material and its container must be disposed of in a safe way as per local legislation. |
| Other information: | Dispose of materials or solids residues at an authorized site. |

### 6.4 Reference to other sections

For further information refer to section 13

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

| | |
|---|---|
| Precautions for safe handling: | Ensure good ventilation of the workstation. Wear personal protective equipment. |
| Hygiene measures: | Do not eat, drink, or smoke when using this product. Always wash hands after handling the product. |

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

| | |
|---|---|
| Technical measures: | Comply with applicable regulations |
| Storage conditions: | Store in a well-ventilated place. Keep cool. |
| Heat and ignition sources: | Avoid high temperatures. |
| Storage area: | Keep container in a well-ventilated place. Keep away from heat and direct sunlight. |
| Special rules on packaging: | Store in accordance with local, regional, national, or international regulations. Keep only in original container. |

**Specific end uses (s):**
No additional information available

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

EH40/2005 workplace exposure limits, fourth edition, published 2020, ISBN 978 0 7176 6733 8.

#### 8.1.1 National occupational exposure and biological limit values
No additional information available

#### 8.1.2 Recommended monitoring procedures
No additional information available

#### 8.1.3 Air contaminants formed.
No additional information available

#### 8.1.4 DNEL and PNEC
No additional information available

#### 8.1.5 Control banding
No additional information available

### 8.2 Exposure Controls
Mandatory general regulations on occupational health. Do not allow to exceed the normative concentrations of hazardous constituents in the workplace.

#### 8.2.1 Appropriate engineering controls
Appropriate engineering controls: Ensure good ventilation at the workstation.

#### 8.2.2 Personal protective equipment
Personal protective equipment: Gloves. Protective clothing. Protective goggles.

**Personal protective equipment symbol(s)**.



### 8.2.2.1 Eye and face protection

Eye protection: Chemical goggles or safety glasses.

| **Physical state** | | | |
|---|---|---|---|
| Type | Field of application | Characteristics | Standard |
| Safety goggles, safety glasses | | With side shields | EN 166 |

### 8.2.2.2 Skin protection

Skin and body protection: Wear suitable protective clothing.

Hand protection: Protective gloves.

| **Hand protection** | | | | | |
|---|---|---|---|---|---|
| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
| Disposable gloves, Reusable gloves | | | | | EN ISO 374 |

Other skin protection:

Materials for protective clothing: Wear personal protective equipment. Chemical resistant safety shoes. Keep suitable Chemically resistant clothing readily available for emergency use.

### 8.2.2.3 Respiratory protection

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

#### 8.2.2.4 Thermal hazards

No additional information available

### 8.2.3 Environmental exposure controls

Environmental Exposure Controls: Avoid release to environment.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties – extinguishing agent

| | |
|---|---|
| Physical state | Liquid |
| Colour | Light Yellow |
| Odour | Odorless |
| Odour threshold | Not available |
| Melting point | Not applicable |
| Freezing point | Not applicable |
| Boiling Point | Not applicable |
| Flammability | Not applicable |
| Explosive limits | Not applicable |
| Lower explosion limit | Not applicable |
| Upper explosion limit | Not applicable |
| Flash Point | Not applicable |
| Autoignition temperature | Not applicable |
| Decomposition temperature | Not applicable |
| pH | 6 – 9 |
| Kinematic viscosity | Not applicable |
| Dynamic viscosity | Not applicable |
| Solubility | 100% water soluble |
| Partition coefficient n-octane/water (log Kow) | Not applicable |
| Vapour pressure | Not applicable |
| Density | 1.06 – 1.02 |
| Relative vapour density at 20°C | Not applicable |
| Particle characteristics | Not applicable |

### 9.2 Other information

#### 9.2.1 Information with regard to physical hazard classes:

No additional information available

#### 9.2.2 Other safety characteristics

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity
The product is stable in normal conditions.

### 10.2 Chemical stability
The product is stable in normal conditions.

### 10.3 Possibility of hazardous reactions
Reacts with alkaline substances, producing ammonia.

### 10.4 Conditions to avoid
Exposure to direct sunlight – Contact with incompatible materials.

### 10.5 Incompatible materials
Strong oxidizing agents, Strong acids, and strong bases.

### 10.6 Hazardous decomposition products
Hazardous decomposition products may include Carbon Monoxide, Carbon Dioxide, and other toxic gases.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on hazard classes as defined in regulation (EC) No. 1272/2008

| | |
|---|---|
| Acute toxicity (oral) | Ethylene Glycol LD50 (Rat) 4700 mg/kg<br>Glycol Butyl Ether LD50 (Rat) 5660mg/kg |
| Acute toxicity (dermal) | Not classified |
| Acute toxicity (inhalation) | Not classified |
| Skin corrosion / irritation | Not classified |
| Serious eye damage / irritation | Not classified |
| Respiratory or skin sensitisation | Not classified |
| Germ cell mutagenicity | Not classified |
| Carcinogenicity | Not classified |
| Reproductive toxicity | Not classified |
| STOT-single exposure | Nitrogen – Exposure to Nitrogen as high concentrations can cause suffocation by reducing oxygen available for breathing |
| STOT- repeated exposure | Not classified |
| Aspiration hazard | Not an aspiration hazard |

### 11.2 Information on other hazards
No additional Information available

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity
Ecology – general: Ethylene Glycol: Fish LC50 (96hours, static) 40000 – 60000 mg/l

### 12.2 Persistence and degradability
Not specified.

### 12.3 Bio-accumulative potential
Not expected to bioaccumulate.

### 12.4 Mobility in soil
No additional information available.

### 12.5 Results of PBT and vPvB assessment
Not applicable.

### 12.6 Endocrine disrupting properties
Not specified

### 12.7 Other adverse effects
Not specified

## SECTION 13: DISPOSABLE INFORMATION

### 13.1 Water treatment methods
Regional legislation (waste): Disposal must be done according to official regulations.

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / IMDG / IATA / ADN / RID /

### 14.1 UN number or ID number

| | |
|---|---|
| UN-No. | UN 1044 |

### 14.2 UN proper shipping names

| | |
|---|---|
| Proper shipping names: | Fire extinguishers with compressed or liquefied gas. |

### 14.3 Transport hazard class(es)

| | |
|---|---|
| Transport hazard class(es): | 2.2 |

### 14.4 Packing group

| | |
|---|---|
| Packing group: | Not applicable |

### 14.5 Environmental hazards

| | |
|---|---|
| Dangerous for the environment: | No |
| Marine pollutant: | No |
| Other information: | No supplementary information available |

### 14.6 Special precautions for user

| | |
|---|---|
| Overland transport: | Not applicable |

### 14.7 Maritime transport in bulk container to IMO instruments

Not applicable

## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, Health, and Environmental Regulations / Legislation Specific for the Substance or Mixture

#### 15.1.1 EU Regulations

**REACHAnnex XVII (Restrictions List) :** Contains no substance(s) listed on REACHAnnex XVII (Restriction Conditions) **REACHAnnex XIV (Authorisations List):**

Contains no substance(s) listed on REACHAnnex XIV (Authorisations List)

**REACH Candidate List (SVHC):** Contains no substance(s) listed on REACH Candidate List.

**PICRegulation List (Prior Informed Consent):** Contains no substance(s) listed on PIC list (Regulation EU649/2012 concerning the export and import of hazardous chemicals).

**POCRegulation List (Persistent Organic Pollutants):** Contains no substance(s) listed on POPlist (Regulation EU2019/1021 concerning persistent organic pollutants).

**Ozone Regulation (1005/2009):** Contains no substance(s) listed on Ozone Depletion list (Regulation EU 1005/2009 concerning substances that deplete the ozone layer).

**Explosives Precursors Regulation (2019/1148):** Contains no substance(s) listed on Explosives Precursors list (EU Regulation 2019/1148 concerning marketing and use of explosive precursors).

### 15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out.

## SECTION 16 : OTHER INFORMATION

| Full text of H- and EUH-statements | |
|---|---|
| H302 | Harmful if swallowed |
| H315 | Causes Skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |

**LEGEND / Abbreviations and acronyms)**

ADN European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road
ATE Acute Toxicity Estimate.
BLV Biological limit value.
CASNo. Chemical Abstract Service Number.
CLP Classification Labelling Packaging Regulation : Regulation (EC) No. 1272/2008.
CE50 Effective Concentration (required to induce a 50% effect).
CE No Identifier in ESIS (European Archive of Existing Substances).
DMEL Derived-Minimal Effect Level.
DNEL Derived No Effect Level.

| | |
|---|---|
| EC50 | Median effective concentration. |
| EC-No. | European Community number. |
| EN | European standard. |
| EmS | Emergency Schedule. |
| GHS | Globally Harmonised System of Classification and Labelling of Chemicals. |
| IATA | International Air Transport Association Dangerous Goods Regulations. |
| IMDG | International Maritime Code for Dangerous Goods. |
| IMO | International Maritime Organization. |
| LC50 | Median Lethal Concentration. |
| LD50 | Median Lethal Dose. |
| LOAEL | Lowest Observed Adverse Effect Level. |
| NOAEC | No Observed Adverse Effect Concentration. |
| OEL | Occupational Exposure Limit. |
| NOAEL | No Observed Adverse Effect Level. |
| NOEC | No Observed Effect Concentration. |
| PBT | Persistent Bio Accumulative Toxic. |
| PNEC | Predicted No Effect Concentration. |
| REACH | Registration, Evaluation, Authorization and Restriction of Chemicals Regulations (EC Regulation 1907/2006) |
| RID | Regulation Concerning the International Transport of Dangerous Goods by Rail. |
| SDS | Safety Data Sheet. |
| TLV | Threshold Limit Value |
| TLV Ceiling | Concentration that should not be exceeded during any time of occupational exposure. |
| TWASTEL | Short term exposure limit. |
| TWA | Time weighted average exposure limit. |
| VOC | Volatile organic compounds. |
| vPvB | Very Persistent and Very Bio Accumulative. |
| WGK | Water Hazard Class. |
| STOT | Specific Target Organ Toxicity. |

**Other Information**

The information contained in the present sheet is based on our own knowledge and believed accurate and reliable. This information is based on current knowledge and is intended to describe the product for the purposes of health, safety, and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

**This MSDS is applicable to the following products:**

| Product Code | Product |
|---|---|
| FX-FFF-002-FCF | Commander 2ltr Fluorine Free Foam Fire Extinguisher |
| FX-FFF-003-FCF | Commander 3ltr Fluorine Free Foam Fire Extinguisher |
| FX-FFF-006-DCF | Commander 6ltr Fluorine Free Foam Fire Extinguisher |
| FX-FFF-009-DCF | Commander 9ltr Fluorine Free Foam Fire Extinguisher |
| RP-FFF-002-FCF | Commander 2ltr Fluorine Free Foam Refill Pack |
| RP-FFF-003-FCF | Commander 3ltr Fluorine Free Foam Refill Pack |
| RP-FFF-006-DCF | Commander 6ltr Fluorine Free Foam Refill Pack |
| RP-FFF-009-DCF | Commander 9ltr Fluorine Free Foam Refill Pack |

**END OF MSDS**