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

1.1 Product identifier.

Product form:	Mixture
Product name:	PFAS Free Wet Chemical Fire Extinguisher – See page 14 for applicable for fire extinguisher.
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 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 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: H280
Signal Word: Warning – Contains gas under pressure

Hazard Statements	
Physical Hazards	Warning – Contains gas under pressure
Health Hazards	Does not meet the criteria for classification.
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. 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 EC No. 231-791-2	>40	-
Potassium Acetate	CAS No. 127-08-2 EC No. 204-822-2	<60	-

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.

The product is not flammable. Pressurized containers may explode if exposed to heat or fire.

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

Substance name	TWA	STEL	BLV
Water	-	-	-
Potassium Acetate	-	-	-

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	Clear
Odour	Odorless
Odour threshold	Not available
Melting point	Not applicable
Freezing point	Not applicable
Boiling Point	100°C
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	8
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	1.32 (Water =1)
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 – Water reactive materials.

10.6 Hazardous decomposition products
Oxides of Carbon - Potassium

SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute toxicity (oral)	LD50 (Rat) 3250 mg/kg
Acute toxicity (dermal)	LD50 (Rabbit) >20,000 mg/kg
Acute toxicity (inhalation)	LC50 (Rat) >5.6mg/L (Analogous compound)
Skin corrosion / irritation	Potassium Acetate - not irritating (Rabbit)
Serious eye damage / irritation	Potassium Acetate - not irritating (Rabbit)
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:

Potassium Acetate –
LC50 Zebrafish 1497 mg/L 96hr
EC50 Daphina Magna – 420 mg/l 48hr
EC50 Mann Diatom 500mg/l 72hr

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. (ADR):	Not applicable
UN-No. (IMDG):	UN 1044
UN-No. (IATA):	Not applicable
UN-No. (ADN):	Not applicable
UN-No. (RID):	Not applicable

14.2 UN proper shipping names

Proper shipping names. (ADR):	Not applicable
Proper shipping names. (IMDG):	Fire extinguishers with compressed or liquefied gas.
Proper shipping names. (IATA):	Not applicable
Proper shipping names. (ADN):	Not applicable
Proper shipping names. (RID):	Not applicable

14.3 Transport hazard class(es)

ADR –Transport hazard class(es):	Not applicable
IMDG –Transport hazard class(es):	Not applicable
IATA–Transport hazard class(es):	Not applicable
ADN –Transport hazard class(es):	Not applicable
RID– Transport hazard class(es):	Not applicable

14.4 Packing group

Packing group ADR:	Not applicable
Packing group IMDG:	Not applicable
Packing group IATA:	Not applicable
Packing group ADN:	Not applicable
Packing group RID:	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
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 the information provided according to each specific use of the product.

This MSDS applies to the following products:

Product code
FX-WCH-003-DCF
FX-WCH-006-DCF

END OF MSDS