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Version number:	**1.2**

SAFETY DATA SHEET

[According to Regulation (EC) No. 1907/2006 (REACH)]

SECTION 1: Identification of the substance / mixture and of the company / undertaking

1.1 Product identifier

Trade name: **FB6EASY, FB6MP, FB6S, SFi6**
Other name: ABF Class Foam Fire Extinguisher

(This SDS covers the mixture – Favorit Home and CO_2 used as the propellant in pressurized container.)

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

Relevant identified uses: Fire extinguisher for use on class A, B and F fires
Uses advised against: Not determined

1.3 Details of the supplier of the safety data sheet

Manufacturer / supplier: UTC CCS Manufacturing Polska Sp. z o.o.
Address: Ul. Kolejowa 24, 39-100 Ropczyce, Poland
Telephone number: +48 17 221 02 02
Fax: +48 17 221 02 48
e-mail address of competent person responsible for the SDS: msds-rop@carrier.com

1.4 Emergency Telephone Number

European Union emergency phone number:
112 - in case of poisoning - ask for Poison Information (24 hours a day, 7 days a week).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

Press. Gas, H280
Mixture classified as not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.1.2 Additional information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2 Label elements

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

Hazard pictograms:

Signal word:
Warning

Hazard Statements:
H280: Contents under pressure; may explode if heated.

Precautionary statements:
P403: Store in a well-ventilated place.

EUH-statements:
EUH208 – Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2 methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Further information:
Explosion risk in case of fire.

Supplemental Hazard information (EU):
Not applicable.

2.3 Other hazards
Within expanded foam respiration is not possible, danger of suffocation!

SECTION 3: Composition / information on ingredients

3.1 Substances
Propellant (CO_2):

CAS No	EC No	REACH Registration No	Concentration [%] (w/w)	Name	Classification according to Regulation (EC) No 1272/2008 (CLP)
124-38-9	204-696-9	Listed in Annex IV of Regulation (EC) No 1907/2006 (REACH) - exempted from registration	100	Carbon dioxide	Press. Gas (Liq.), H280

3.2 Mixtures

CAS No	EC No	REACH Registration No	Weight [%]	Name	Classification according to Regulation (EC) No 1272/2008 (CLP)
112-34-5	203-961-6	01-21119475104-44	1-2,5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Eye Irrit. 2, H319

Further information:
There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Brass components of the pressurized container contains Lead CAS No: 7439-92-1 in a concentration greater than 0.1% (w/w).
Mixture contain substance with national limit values, for more information: see SECTION 8.

SECTION 4: First aid measures

4.1 Description of first aid measures
General notes: ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Following inhalation: move the affected person away from the contaminated area and into the fresh air. Get medical attention if symptoms persist.
Following skin contact: after contact with skin, wash immediately with plenty of water and soap. Consult a doctor if disturbing symptom occur.
Following eye contact: immediately flush eyes with large amounts of water. If irritation occurs, get medical assistance.
Following ingestion: rinse the mouth with plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Contact a doctor if disturbing symptom occur.
Self-protection of the first aider: use personal protective equipment as required.

4.2 Most important symptoms and effects, both acute and delayed
Irritation and etching.

4.3 Indication of any immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media: this product is not flammable. Use extinguishing agent suitable for type of surrounding fire, product is used for fire extinguishing.
Unsuitable extinguishing media: none, product is used for fire extinguishing.

5.2 Special hazards arising from the substance or mixture
Carbon dioxide. Carbon monoxide.

5.3 Advice for firefighters
Protection during firefighting: do not enter fire area without proper protective equipment. Avoid contact with water reactive materials, burning metals and electrically energized equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment. Use appropriate respiratory protection. In case of large spills, isolate the exposed area. Avoid direct contact with skin and eyes.

6.2 Environmental precautions
Do not let the product to enter ground waters, drainage system, sewage and soil. Clean contaminated objects and areas thoroughly observing environmental regulations. Notify relevant emergency services. Treat the assimilated material according to the section on waste disposal.

6.3 Methods and material for containment and cleaning up
Soak up inert absorbent and dispose as waste requiring special observation. Use approved industrial vacuum cleaner for removal.

6.4 Reference to other sections
Appropriate conduct with waste product – SECTION 13. Personal protection equipment – SECTION 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Handle in accordance with good occupational hygiene and safety practices. Keep container tightly closed and in a well-ventilated place. Avoid eyes and skin contamination. Wear personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities
Storage temperature: -30/+60°C.

7.3 Specific end use(s)
No information about uses other than mentioned in subsection 1.2.

SECTION 8: Exposure controls / personal protection

8.1 Control parameters
Substance: 2-(2-butoxyethoxy)ethanol (CAS number: 112-34-5)

Country	Limit value - Eight hours		Limit value - Short term		Legal basis
	ppm	mg/m^3	ppm	mg/m^3	
European Union	10	67,5	15	101,2	Directive 2006/15/EC of 7 February 2006.
Austria	10	67,5	15	101,2	Limits Ordinance 2011, version of 13.02.2017.
Belgium	10	67,5	15	101,2	Federal Public Service Employment - List of limit values for exposure to chemical agents.
Bulgaria	10	68	15	101,2	Ordinance No. 13 of 30 December 2003 to protect workers from the risks related to exposure to chemical agents at work.
Croatia	10	67,5	15	101,2	Occupational Exposure Limits. Pursuant to Article 12 Paragraph 1 of the Law on Protection at Work ("Official Gazette", Nos. 59/96, 94/96, 114/03, 100/04, 86/08 and 116/08), the Minister of Economy, Labour and Entrepreneurship. Exposure limits set forth Hazardous Substances

Country	Limit value - Eight hours		Limit value - Short term		Legal basis
	ppm	mg/m³	ppm	mg/m³	
					At Work And A Biological Limit Values.
Cyprus	10	67,5	15	101,2	Safety and Health at Work (Chemical Agents) Regulations of 2001.
Czech Republic	-	70	-	100	9/2013 Government Regulation of 20 December 2012 amending Regulation no. 361/2007 establishing the conditions of health protection at work.
Denmark	10	68	-	-	Order on limit values for substances and materials no. 986 of 11 October 2012, which came into force on 12 October 2012.
Estonia	10	67,5	-	-	Government of the Republic on 18 September 2001. A Regulation No. 293 "Occupational exposure limits".
Finland	10	68	-	-	Ministry of Health publications - TWA 2016 Workplace exposure limits and Social Affairs.
France	10	67,5	15	101,2	The National Institute for Research and Safety for the Prevention of Occupational Accidents and Diseases (INRS) - Occupational Exposure Limits to Chemical Agents in France.
Germany	10	67,0	-	-	Technical rules for hazardous substances. Committee for Hazardous Substances (AGS) 1/2006 p. 41-55 last amended and supplemented: 4.11.2016.
Great Britain	10	67,5	15	101,2	Health and Safety Executive - EH40 (Second edition, published 2011) Workplace exposure limits.
Greece	10	67,0	15	101,2	Occupational Exposure Limits.
Hungary	-	67,5	-	101,2	25/2000 Chemical safety on the job. (IX. 30), the Minister of Health, Social and Family Affairs.
Iceland	10	67,0	15	101,2	Occupational Exposure Limits.
Ireland	10	67,5	15	101,2	Ireland's National Authority for Occupational Safety and Health in Schedule 1 to the 2002 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001.
Italy	10	67,5	15	101,2	Limit values Italy: Legislative Decree of the Government 277, the Legislative Decree 66 of 15/08/1991, 25/02/2000, 26/02/2004 Ministerial Decree.
Latvia	10	67,5	15	101,2	Revised by the Ministry of Welfare Ministers of May 15th 2007, Annex 1 regulations No. 325 Chemical occupational exposure limits (WEL).
Lithuania	15	100,0	30	200,0	Lithuanian Hygiene Norm HN 23: 2011 Chemicals limit values. Measurement and Impact Assessment General Requirements for Occupational Exposure Limit values.
The Netherlands	-	50	-	100	OEL Database of the Social and Economic Council of the Netherlands (SER).
Norway	10	68	-	-	Regulations on measures and limit values for physical and chemical factors in the work environment and contamination risk groups for biological factors (regulation about measures and limits).
Poland	-	67	-	100	Ordinance of the Minister of Labour and Social Policy on the Maximum Admissible Concentrations and Intensities of Harmful to Health Agents in the Working Environment.
Portugal	10	67,5	15	101,2	Law gazette, 1st series – No. 26 - February 6, 2012 ANNEX III Indicative occupational exposure limit values.
Romania	-	150	-	250	Occupational Exposure Limits.
Slovakia	10	67,5	15	101,2	Annex. 1. Government Decree no. 355/2006. Exposure limits of chemical agents in the workplace atmosphere.
Slovenia	10	67,5	15	101,25	Occupational Exposure Limits.
Spain	10	67,5	15	101,2	Ministry of Employment and Social Security Occupational exposure limits for chemical agents in Spain (2016).
Sweden	10	68	15	101	Occupational exposure limits (AFS 2015: 7) Work Environment.
Switzerland	10	67	15	101	SUVA - limits at the workplace 2016.
Turkey	10	67,5	15	101,2	The Ministry Of Labor And Social Security. Health In Work With Chemical Compounds. Regulation On Security Measures 2013.

Substance: Carbon dioxide (CAS number: 124-38-9)

Country	Limit value - Eight hours		Limit value - Short term		Legal basis
	ppm	mg/m³	ppm	mg/m³	
European Union	5000	9000	-	-	Directive 2006/15/EC of 7 February 2006.
Austria	5000	9000	10000	18000	Limits Ordinance 2011, version of 13.02.2017.
Belgium	5000	9131	30000	54784	Federal Public Service Employment - List of limit values for exposure to chemical agents.
Bulgaria	5000	9000	-	-	Ordinance No. 13 of 30 December 2003 to protect workers from the risks related to exposure to chemical agents at work.
Croatia	5000	9000	-	-	Occupational Exposure Limits. Pursuant to Article 12 Paragraph 1 of the Law on Protection at Work ("Official Gazette", Nos. 59/96, 94/96, 114/03, 100/04, 86/08 and 116/08), the Minister of Economy, Labour and Entrepreneurship. Exposure limits set forth Hazardous Substances At Work And A Biological Limit Values.
Cyprus	5000	9000	-	-	Safety and Health at Work (Chemical Agents) Regulations of 2001.
Czech Republic	-	9000	-	45000	9/2013 Government Regulation of 20 December 2012 amending Regulation no. 361/2007 establishing the conditions of health protection at work.
Denmark	5000	9000	-	-	Order on limit values for substances and materials no. 986 of 11 October 2012, which came into force on 12 October 2012.
Estonia	5000	9000	-	-	Government of the Republic on 18 September 2001. A Regulation No. 293 "Occupational exposure limits".
Finland	5000	9100	-	-	Ministry of Health publications - TWA 2016 Workplace exposure limits and Social Affairs.
France	5000	9000	-	-	The National Institute for Research and Safety for the Prevention of Occupational Accidents and Diseases (INRS) - Occupational Exposure Limits to Chemical Agents in France.
Germany	5000	9100	-	-	Technical rules for hazardous substances. Committee for Hazardous Substances (AGS) 1/2006 p. 41-55 last amended and supplemented: 4.11.2016.
Great Britain	5000	9150	15000	27400	Health and Safety Executive - EH40 (Second edition, published 2011) Workplace exposure limits.
Greece	5000	9000	5000	54000	Occupational Exposure Limits.
Hungary	-	9000	-	-	25/2000 Chemical safety on the job. (IX. 30), the Minister of Health, Social and Family Affairs.
Iceland	5000	9000	-	-	Occupational Exposure Limits.
Ireland	5000	9000	15000	27000	Ireland's National Authority for Occupational Safety and Health in Schedule 1 to the 2002 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001.
Italy	5000	9000	-	-	Limit values Italy: Legislative Decree of the Government 277, the Legislative Decree 66 of 15/08/1991, 25/02/2000, 26/02/2004 Ministerial Decree.
Latvia	5000	9000	-	-	Revised by the Ministry of Welfare Ministers of May 15th 2007, Annex 1 regulations No. 325 Chemical occupational exposure limits (WEL).
Lithuania	5000	9000	-	-	Lithuanian Hygiene Norm HN 23: 2011 Chemicals limit values. Measurement and Impact Assessment General Requirements for Occupational Exposure Limit values.
The Netherlands	-	9000	-	-	OEL Database of the Social and Economic Council of the Netherlands (SER).
Norway	5000	9000	-	-	Regulations on measures and limit values for physical and chemical factors in the work environment and contamination risk groups for biological factors (regulation about measures and limits).
Poland	-	9000	-	27000	Ordinance of the Minister of Labour and Social Policy on the Maximum Admissible Concentrations and Intensities of Harmful to Health Agents in the Working Environment.
Portugal	5000	9000	-	-	Law gazette, 1st series – No. 26 - February 6, 2012 ANNEX III Indicative occupational exposure limit values.
Romania	5000	9000	-	-	Occupational Exposure Limits.
Slovakia	5000	9000	-	-	Annex. 1. Government Decree no. 355/2006. Exposure limits of chemical agents in the workplace atmosphere.
Slovenia	5000	9000	-	-	Occupational Exposure Limits.

Country	Limit value - Eight hours		Limit value - Short term		Legal basis
	ppm	mg/m³	ppm	mg/m³	
Spain	5000	9150	-	-	Ministry of Employment and Social Security Occupational exposure limits for chemical agents in Spain (2016).
Sweden	5000	9000	10000	18000	Occupational exposure limits (AFS 2015: 7) Work Environment.
Switzerland	5000	9000	-	-	SUVA - limits at the workplace 2016.
Turkey	5000	9000	-	-	The Ministry Of Labor And Social Security. Health In Work With Chemical Compounds. Regulation On Security Measures 2013.

For more information, please check any national occupational exposure limit values in your country.

8.2 Exposure controls

8.2.1 Appropriate engineering controls
If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn. Observe good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Wash hands thoroughly before breaks and after work. Ensure adequate general and/or local ventilation in the workplace.

8.2.2 Personal protection equipment
Personal protective equipment must meet requirements of directive 89/686/CE. Employer is obliged to ensure equipment adequate to activities carried out, with quality demands, cleaning and maintenance.

Hand and body protection:
Under normal conditions of work is not required.

Eye and face protection:
Avoid eye contact. Wear vented goggles.

Respiratory protection:
With correct and proper use, and under normal conditions, breathing protection is not required.

8.2.3 Environmental exposure controls
Avoid release to the environment, do not enter the sewage system. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Basic physical and chemical properties of:

	Mixture (Favorit Home)	Propellant (CO_2)
a) physical state/form:	liquid	gas [20°C/101 kPa]
b) colour:	brownish	colourless
c) odour:	weak	no odour
d) odour threshold:	not determined	not applicable
e) pH:	8 – 9	not applicable
f) melting point/freezing point:	-30°C	-78.5°C
g) initial boiling point and boiling range:	not determined	-56.6°C (s)

h)	**flash point:**	not applicable	not applicable
i)	**evaporation rate:**	not applicable	not determined
j)	**flammability (solid, gas):**	not applicable	not flammable
k)	**upper/lower flammability or explosive limits:**	not applicable	not applicable
l)	**vapour pressure:**	not applicable	57,3 bar [20°C]
m)	**vapour density:**	not applicable	1,52
n)	**density:**	1,27 g/cm^3 (20°C)	0,82 g/cm^3
o)	**solubility(ies):**	water – soluble	2000 mg/l soluble in water
p)	**partition coefficient n-octanol/water:**	not determined	0,83
q)	**auto-ignition temperature:**	not applicable	not applicable
r)	**decomposition temperature:**	not applicable	not applicable
s)	**explosive properties:**	not applicable	not applicable
t)	**oxidising properties:**	not applicable	none
u)	**viscosity:**	not applicable	not applicable

9.2 Other information
No additional test results.
Product contains gas under pressure.

SECTION 10: Stability and reactivity

10.1 Reactivity
None/none.

10.2 Chemical stability
No additional information available.

10.3 Possibility of hazardous reactions
No dangerous reactions are known.

10.4 Conditions to avoid
Avoid elevated temperatures, sources of fire and heat.

10.5 Incompatible materials
No additional information available.

10.6 Hazardous decomposition products
No additional information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity: based on available data, the classification criteria are not met.
Skin corrosion/irritation: based on available data, the classification criteria are not met.
Serious eye damage/irritation: based on available data, the classification criteria are not met.
Respiratory or skin sensitization: based on available data, the classification criteria are not met.
Germ cell mutagenicity: based on available data, the classification criteria are not met.
Carcinogenicity: based on available data, the classification criteria are not met.

Reproductive toxicity: based on available data, the classification criteria are not met.
STOT-single exposure: based on available data, the classification criteria are not met.
STOT-repeated exposure: based on available data, the classification criteria are not met.
Aspiration hazard: based on available data, the classification criteria are not met.

Other information: in susceptible individuals may cause eyes and skin irritation. The mixture does not meet the classification criteria: irritation to skin and eyes, according to CLP Regulation.

SECTION 12: Ecological information

12.1 Toxicity
Product has not been tested.

12.2 Persistence and degradability
Product has not been tested.

12.3 Bio accumulative potential
Product has not been tested.

12.4 Mobility in soil
Product has not been tested.

12.5 Results of PBT and vPvB assessment
Product has not been tested.

12.6 Other adverse effects
Propellant:
Effect on the ozone layer: none.
Global warming potential [CO_2=1]: 1.
Effect on global warming: when discharged in large quantities may contribute to the greenhouse effect.
Contains greenhouse gas not covered by Regulation (EC) 842/2006.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Disposal methods for the mixture: do not deposit with household waste. Waste should not be disposed of by release to sewers. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Waste disposal according to EC Directives 75/442/EEC and 91/689/EEC on waste and hazardous waste in their latest versions.
Disposal methods for used packing: package should be passed to a certified company. Do not mix with other wastes. Waste code should be assigned in place of formation. Waste code should be assigned in place of formation.

Legal basis: Directive 2008/98/EC, 94/62/EC.

SECTION 14: Transport information

14.1 UN Number
UN 1044

14.2 UN proper shipping name
Fire extinguisher

14.3 Transport hazard class(es)
2.2

14.4 Packing group
Not applicable.

14.5 Environmental hazards
Not applicable.

14.6 Special precautions for user
Land carriage:
- according to special regulation 594 free from GGVSE/ADR-regulations.
Sea carriage:
- IMDG/GGV sea: Class 2.2
- EMS: F-C,S-V
- PG: none,
- marine pollutant: no marking / label,
- danger marking No. 2.2

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Directive **2006/15/EC** of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.
Commission **Regulation (EU) 2015/830** of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance) as amended.
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

15.2 Chemical safety assessment
For this mixture a chemical safety assessment has been carried out. Mixture do not meet criteria of classification – exposure scenario is not attached.

SECTION 16: Other information

Relevant H- and EUH-phrases (number and full text):
H280: Contents gas under pressure; may explode if heated.
H319: Causes serious eye irritation

Abbreviations and acronyms:
PBT: Persistent, Bioaccumulative and Toxic substance
vPvB: very Persistent, very Bioaccumulative substance

Trainings:
Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

Key literature references and sources of data:
This SDS was prepared on the basis of sheets of the ABF fire extinguishing mixture, literature data, online databases as well as our knowledge and experience, taking into account current legislation.

Additional information:
Classification was based on data on hazardous substances calculation method under the guidance of Regulation 1272/2008/EC (CLP).

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.