FS6-FS9-FS2-FG6/J

SECTION1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product code : FS6-FS9-FS2-FG6/J

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

FS2 = 2 liters extinguisher with permanent pressure (11bar), to fire A-B-F.
FS6 = 6 litres extinguisher with permanent pressure (11bar), to fire A-B-(F).
FS9 = 9 litres extinguisher with permanent pressure (11bar), to fire A-B-(F).
FG6/J = 6 litres extinguisher with auxiliary pressure (11bar only after activating with CO2 cartridge), to fire A-B-(F).

Sectors of use: Private households (= general public = consumers)[SU21], Public domain (administration, education, entertainment, services, craftsmen)[SU22]
Uses advised against: Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

ANAF FIRE PROTECTION S.P.A.
Via del Commercio, 4
27020 Torre d'Isola
Tel. 0039 (0)382 45 33
Fax: 0039 (0)382 92 02 79
e-mail: info@anaf.eu
Internet: www.anaf.eu

1.4. Emergency telephone number

Ing. Danilo Romano
Tel. 0039 (0)382 45 33

SECTION2. Hazards identification

2.1. Classification of the substance or mixture

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

Pictograms:
GHS04

Hazard Class and Category Code(s):
Press. Gas

Hazard statement Code(s):
H280 - Contains gas under pressure; may explode if heated.

Contains gas under pressure, warning: may explode if heated

2.2. Label elements



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

Pictogram, Signal Word Code(s):
GHS04 - Warning

Hazard statement Code(s):
H280 - Contains gas under pressure; may explode if heated.

Supplemental Hazard statement Code(s):
not applicable

Precautionary statements:
Storage
P410+P403 - Protect from sunlight. Store in a well-ventilated place.

Content of VOC ready to use condition: 0,99 %

2.3. Other hazards

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

SECTION3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration	Classification	Identificativi
2-(2-BUTOXYETHOXY)ETHANOL	> 0,1 <= 1%	Eye Irrit. 2, H319	CE 603-096-00-8 CAS 112-34-5 EINECS 203-961-6 REACH 01-2119475104-44
(CARBOXYMETHYL)DIMETHYL[3-(GAMMA-OMEGA-PERFLUORO-1-C6-14 -ALKANESULFONAMIDO)PROPYL)A	> 0,1 <= 1%	Aquatic Chronic 2, H411	CE CAS 133875-90-8 EINECS REACH
N-OXIDE OF PERFLUOROALKYLAMINE	> 0,1 <= 1%	Aquatic Chronic 3, H412	CE CAS 80475-32-7 EINECS 279-481-6 REACH

SECTION4. First aid measures

4.1. Description of first aid measures

Inhalation:
Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area.
If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:
Wash thoroughly with soap and running water.

Direct contact with eyes (of the pure product).:
Wash immediately and thoroughly with running water for at least 10 minutes.

Ingestion:
It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

No data available.

SECTION5. Firefighting measures

5.1. Extinguishing media

The mixture is a fire extinguisher agent for fires of class A, B and F.

5.2. Special hazards arising from the substance or mixture

Manufactured under pressure in sealed metal container. Cool containers with water spray trying to remove them from the fire. The aerosol containers can be overheated and burst violently ejected from a distance (protect the head using a safety helmet).
The containers overheated burst and can be ejected with violence from a distance.

5.3. Advice for firefighters

Specific methods of firefighting: open doors and Windows of the room to allow maximum ventilation. Do not breathe vapors (toxic). Ask a favor of the wind in relation to the fire.
Pour cold water containers exposed to flames until the fire will not be extinct.
Special protection in the fight against fire: in case of presence of vapors use a self-contained breathing apparatus.
Place of fire debris and contaminated water in accordance with official regulations.

SECTION6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:
Leave the surrounding area recalling that any overheating could project the cylinder at a considerable distance.
Wear gloves and protective clothing

6.1.2 For emergency responders:
However if some container is damaged likely to cause a loss, insulate the tank in question by bringing it to open air or covering it with inert material and fuel (eg sand, earth, vermiculite).
Wear gloves and protective clothing.
Provision of sufficient ventilation.
Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill
Inform the competent authorities.
Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:
Recover the product for reuse, if possible, or the removal.

6.3.2 For cleaning up:
After wiping up, wash with water the area and materials involved

6.3.3 Other information:
None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors
Use extreme caution when handling the product. Avoid shock.
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.
Do not pierce or burn, even after the use. Do not spray on flame or incandescent objects. Use in adequately ventilated areas.
See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers upright and safe by avoiding the possibility of falls or collisions.
Pressurized container. Store in a ventilated place, in original packaging away from heat and sunlight.
Always store in well ventilated areas.
Avoid direct sunlight exposure.

7.3. Specific end use(s)

Follow the rules of good hygiene in the workplace.

SECTION8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:
2-(2-BUTOXYETHOXY)ETHANOL:
TLV-TWA: 10ppm; 67,5mg/m3 (2006/15/EC).
TLV-STEL: 15ppm; 101,2mg/m3 (2006/15/EC).
MAK: 100 mg/m3 peak limitation category: I (1) Pregnancy risk group: C (DFG 2003).

- Substance: 2-(2-BUTOXYETHOXY)ETHANOL
DNEL
Systemic effects Long term Workers inhalation = 67,5 (mg/m3)
Systemic effects Long term Workers dermal = 20 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 34 (mg/m3)
Systemic effects Long term Consumers dermal = 10 (mg/kg bw/day)
Systemic effects Short term Consumers oral = 1,25 (mg/kg bw/day)
Local effects Long term Workers inhalation = 67,5
Local effects Long term Consumers inhalation = 34 (mg/m3)
Local effects Short term Consumers inhalation = 50,6 (mg/m3)
PNEC
Sweet water = 1 (mg/l)
sediment Sweet water = 4 (mg/kg/sediment)
Sea water = 0,1 (mg/l)
sediment Sea water = 0,4 (mg/kg/sediment)
intermittent emissions = 3,9 (mg/l)
STP = 200 (mg/l)
ground = 0,4 (mg/kg ground)

8.2. Exposure controls



Appropriate engineering controls:
Well ventilated environment. Observe the safety measures used in handling chemicals.

Individual protection measures:

a) Eye / face protection
When handling the pure product use safety glasses (spectacles cage) (EN 166).

b) Skin protection

i) Hand protection
When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3)

ii) Other
When handling the pure product wear full protective skin clothing.

c) Respiratory protection
Not needed for normal use.

d) Thermal hazards
No hazard to report

Environmental exposure controls:
Use according to good working practices to avoid pollution into the environment.

SECTION9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value
Appearance	Fire extinguishing mixture in canister
Odour	Odorless
Odour threshold	Undefined
pH	Undefined
Melting point/freezing point	Undefined
Initial boiling point and boiling range	Undefined
Flash point	Undefined
Evaporation rate	Undefined
Flammability (solid, gas)	Undefined
Upper/lower flammability or explosive limits	Undefined
Vapour pressure	Undefined
Vapour density	Undefined
Relative density	Undefined
Solubility	Undefined
Water solubility	Undefined
Partition coefficient: n-octanol/water	Undefined
Auto-ignition temperature	Undefined
Decomposition temperature	Undefined
Viscosity	Undefined
Explosive properties	Undefined
Oxidising properties	Undefined

9.2. Other information

Content of VOC ready to use condition: 0,99 %

FS2 = 2 liters extinguisher with permanent pressure (11bar), to fire A-B-F.
FS6 = 6 litres extinguisher with permanent pressure (11bar), to fire A-B-F.
FG6/J = 6 litres extinguisher with auxiliary pressure (11bar only after activating with CO2 cartridge), to fire A-B-F.

SECTION10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

The product for thermal decomposition can generate vapours, fumes of ammonia and phosphorus oxides.

10.4. Conditions to avoid

Shock or permanent deformation.
Over 70°C thermal decomposition occur with generation of ammonia gas.
Proximity to sources of heat or fire.
Contamination with incompatible materials.
Heating content.
Welding or heating in the devices or systems that may contain residues of the product.

10.5. Incompatible materials

Strong oxidants.

10.6. Hazardous decomposition products

The product can cause thermal decomposition vapours of ammonia and phosphorus oxides.

SECTION11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = ∞
ATE(mix) dermal = ∞
ATE(mix) inhal = ∞

(a) acute toxicity: 2-(2-BUTOXYETHOXY)ETHANOL: Acute hazards/symptoms;
Skin: dry scalp.
Eye: Eye Redness. Pain.
(b) skin corrosion/irritation2-(2-BUTOXYETHOXY)ETHANOL: Irritating.
(c) serious eye damage/irritation: based on available data, the classification criteria are not met.
(d) respiratory or skin sensitization: based on available data, the classification criteria are not met.
(e) germ cell mutagenicity: based on available data, the classification criteria are not met.
(f) carcinogenicity: based on available data, the classification criteria are not met.
(g) reproductive toxicity: based on available data, the classification criteria are not met.
(h) specific target organ toxicity (STOT) single exposure: 2-(2-BUTOXYETHOXY)ETHANOL: The substance 'irritating

to eyes
(i) specific target organ toxicity (STOT) repeated exposure: based on available data, the classification criteria are not met.
(j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:
2-(2-BUTOXYETHOXY)ETHANOL:
A harmful contamination of air sar reached slowly for evaporation of this substance at 20°C; However, for spraying or scattering, much more quickly.
The liquid degreasing the skin features.
LD50 (rat) Oral (mg/kg body weight) = 2410
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2764

SECTION12. Ecological information

12.1. Toxicity

Related to contained substances:
2-(2-BUTOXYETHOXY)ETHANOL:
Toxic for fish:
LD50 (83d) = 1300mg/L
Toxic to invertebrates:
EC50 (48 h) = 100 mg/L (Daphnia magna)
Toxic for algae:
EC50 (192h) = 53mg/L
C(E)L50 (mg/l) = 100

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

Related to contained substances:
2-(2-BUTOXYETHOXY)ETHANOL:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

12.6. Other adverse effects

No adverse effects

SECTION13. Disposal considerations

13.1. Waste treatment methods

The waste must be disposed of in compliance with the regulations in force delivering empty containers for final disposal and equipped to safely handle pressurized containers containing flammable liquids and gas waste. The empty container heated to temperatures exceeding 70 ° C can burst.
Recover if possible. Operate according to local or national regulations

SECTION14. Transport information

14.1. UN number

1044



14.2. UN proper shipping name

EXTINGUISHERS

14.3. Transport hazard class(es)

2.2

14.4. Packing group

n.a.

14.5. Environmental hazards

ADR/RID/ADN: no
IMDG Code: no
IATA-DGR/ICAO-TI: no

14.6. Special precautions for user

Materials can be exempted for ADR / RID / ADN in case of transport in strong outer packagings, see SP 594

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

n.a

SECTION15. Regulatory information

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

Reg (EC) n. 1907/2006 (REACH), Reg (EC) n. 1272/2008 (CLP), Reg (EC) n. 453/2010 (Requirements for the compilation of safety data sheets), Reg (E) n.790/2009, Dir 96/82/EC as amended.

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION16. Other information

16.1. Other information

Points modified compared to previous release: 1.1. Product identifier, 1.2. Relevant identified uses of the substance or mixture and uses advised against, 2.2. Label elements, 2.3. Other hazards, 5.1. Extinguishing media, 5.2. Special hazards arising from the substance or mixture, 5.3. Advice for firefighters, 6.1. Personal precautions, protective equipment and emergency procedures, 7.1. Precautions for safe handling, 7.2. Conditions for safe storage, including any incompatibilities, 7.3. Specific end use(s), 8.1. Control parameters, 8.2. Exposure controls, 9.2. Other information, 10.3. Possibility of hazardous reactions, 10.4. Conditions to avoid, 10.5. Incompatible materials, 10.6. Hazardous decomposition products, 11.1. Information on toxicological effects, 12.1. Toxicity, 12.2. Persistence and degradability, 12.5. Results of PBT and vPvB assessment, 14.1. UN number, 14.2. UN proper shipping name, 14.3. Transport hazard class(es), 14.4. Packing group, 14.5. Environmental hazards, 14.6. Special precautions for user

Description of the hazard statements exposed to point 3
H319 = Causes serious eye irritation.
H411 = Toxic to aquatic life with long lasting effects.
H412 = Harmful to aquatic life with long lasting effects.

Classification based on data of all mixture components

Regulatory information:
Dir 67/548 29° Amendment
Dir 1999/45/EC e s.a.a.
Dir 2001/60/EC
Reg 1907/2006 EC
Reg 1272/2008 EC
Reg 453/2010 EC

NOTICE TO USERS
The information contained in this sheet are based on the knowledge available at the date of the preparation of this sheet.
The user must be aware of the possible risks associated with the use of the product, other than that for which the product is supplied. The sheet does not exonerate the user from knowing and applying all the regulations governing its activities. The set of regulations mentioned is simply to help the user to fulfill its obligations regarding the use of hazardous products.
This sheet does not exonerate the user from other legal obligations than those mentioned and from rules regulating possession and use of the product, since the user is the only responsible.

*** This sheet supersedes all previous editions.