

1 ABERDEEN FOAM 1% F3-LF



Low Freeze Fluorine Free Fire Fighting Foam Concentrate



An EN1568 pt 3 certified Fluorine Free (F3) Fire Fighting Foam concentrate, operational at -23°C, for extinguishing and securing flammable hydrocarbon liquid fires.

Aberdeen Foam 1% F3-LF is a low viscosity newtonian Fluorine Free Foam. Designed for minimal environmental impact to quickly extinguish and secure Class B hydrocarbon fires of liquids such as crude oil, gasoline, aviation kerosene and fuel oil.

Formulated for use with fresh water, freeze protected to **-23°C** and fully biodegradable.

Not suitable for use on fuels which are polar solvents and water miscible such as alcohols, ketones, aldehydes and ethers.

Can also combat Class A fires due to excellent wetting abilities.

HOW IT WORKS

Aberdeen Foam 1% F3-LF effectively extinguishes and secures liquid hydrocarbon fires by cooling the fuel's surface and creating a stable blanket to suppress the release of flammable vapours.

PROPORTIONING INFORMATION

- 1 part foam concentrate to 99 parts water

FIRE PERFORMANCE ACCREDITATIONS

Aberdeen Foam 1% F3-LF concentrate meets the requirements of:

- **EN 1568: 2018 Part 3:** Class IB in fresh water

PHYSICAL PROPERTIES

• Appearance	Amber liquid
• Specific gravity	1.15
• pH @ 20°C	8.0
• Kinematic viscosity 375s ⁻¹ @ 20°C (mPas)	≤ 60
• Surface tension @ 20°C (mN/m)	≤ 30
• Freezing point (°C)	≤ -23
• Lowest use temp. (°C)	-23
• Expansion*	≥ 7.0
• 25% drainage (minutes)	≥ 4.0
• Max. storage temp. (°C)	50
• Min. storage temp. (°C)	-23
• Freeze/thaw effect	None

* Foam quality will depend on the foam equipment used and the operating conditions. The above are tested in accordance with UK Defence Standard 42-40.

**FLUORINE
FREE**

**EN 1568
Part 3: 2018**

**EU 2019/1021
COMPLIANT**

1% F3-LF

FOAMING PROPERTIES

Foam expansion properties will vary depending on several factors including:

- Water hardness
- Equipment characteristics
- Equipment flow rate

For example, aspirating devices will produce typical expansion ratios of between 6:1 and 10:1 and non-aspirating devices between 2:1 and 4:1.

Always check your equipment's operation manual for guidance.

APPLICATIONS

Aberdeen Foam 1% F3-LF concentrate provides quality protection wherever hydrocarbons present a fire risk:

- Petrochemical refining, processing and storage facilities
- Marine terminals, power stations and road / rail loading racks
- Rapid Intervention Vehicles and aircraft hangar systems

Produced F3 foams can also be used as wetting agents for combating Class A fires (i.e.tyres, paper, wood) and for providing a vapour suppression blanket on hydrocarbon spills.

PROPORTIONING EQUIPMENT

Aberdeen Foam 1% F3-LF concentrate is readily proportioned with the following equipment:

- In-line inductors (fixed or portable)
- Balanced pressure variable flow proportioners
- Around the pump proportioners
- Bladder tank Balanced Pressure proportioning skid
- Handline, aspirating nozzles with fixed inductor pickup tube

DISCHARGE EQUIPMENT

Aberdeen Foam 1% F3-LF concentrate is suitable for use with:

- Foam chambers
- Aspirating and non-aspirating sprinklers or spray nozzles
- Water fog nozzles for handlines and monitors
- Foam makers for use with either Floating Roof or Bund Protection systems

DISPOSAL

Produced Aberdeen Foam 1% F3-LF can be safely disposed of in biological waste water treatment systems.

ENVIRONMENTAL IMPACT

- Non-persistent in the environment.
- Fluorosurfactant free. • Fully biodegradable.
- Meets EU2019/1021 - complies with EU and UK PFOA restrictions.
- Not particularly toxic to microbial populations normally found in treatment plants. Compatible with the treatment plant's flora.
- Anti-foam agents may be used to reduce foam in in waste streams.

STORAGE AND SHELF LIFE

Best stored as supplied in original, unopened containers. Suitable for storage in containers and tanks manufactured from:

- Stainless steel (Type 304L or 316L)
- High density cross-linked polyethylene
- FRP (vinyl ester epoxy resin only)
- Carbon steel "black" pipe
- Brass compounds
- Concentrate must **not** be stored or come in contact with galvanised tanks, pipes or fittings

If kept in the original manufacturer's supplied container and stored between -21°C and 50°C a shelf life of at least 20 years can be expected.

To prolong the shelf life of any foam concentrate, do not expose to temperature extremes and prevent contamination from foreign materials. If product is frozen, thawing will not effect performance. Mixing after freeze/thaw is recommended.

COMPATIBILITY

As recommended by NFPA 11: 2021, we would advise that if mixing foam concentrates from different manufacturers a compatibility study is carried out beforehand.

For further information or advice on compatibility testing, please contact Oil Technics Limited.

INSPECTION AND TESTING

As recommended by NFPA 11: 2021 and BS EN 13565-2: 2018, Aberdeen Foam foam concentrates should be inspected and tested at least annually as part of your fire fighting foam maintenance programme.

Oil Technics Limited offers a worldwide foam testing service and inhouse foam testing training. For further details, please contact us or visit our website: foamtesting.com

TECHNICAL SERVICES AND SALES SUPPORT

For our UK customers, Aberdeen Foam is available 24/7 via our 24 hour emergency call out service: +44 (0) 1561 361515.

PACK SPECIFICATIONS

Capacity	20L	25L	200L	1000L	2700L Bulk tank
Dimensions (cm)	40 x 29.5 x 24.5	47 x 29.5 x 24.5	92 x 58 x 58	102 x 100 x 116	215 x 185 x 213
Empty weight (kg)	0.8	0.9	8	60	2000
Filled weight (kg)	22.2	27.6	222	1130	3890

These measurements are for reference purposes only and are intended as guidelines only. Oil Technics Ltd reserve the right to modify any specification at any time and without prior notice.