

# Class A Fire Fighting Foam Concentrate



# A synthetic Fire Fighting Foam concentrate for Class A fires, e.g. forest fires, structural fires and tyre fires.

Designed to offer superior penetration into burning Class A materials.

# Formulated for use with either fresh or seawater.

Highly versatile and suitable for use with a range of equipment, methods of application and proportion rates - intended for use between 0.1% and 1.0%.

Can be used on small Class B hydrocarbon fires such as fuel tanks leaks or minor spills.

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

# **FEATURES**

- Provides quality protection from Class A fire risks such as:
- Rubber tyres
  Coal
  Paper & wood
  Forest fires
- Economical proportioning rates of between 0.1% and 1.0%
- Versatile can be used in different equipment and application methods
- Easily premixed and excellent foaming properties
- Free from elements harmful to soil no negative effect on reforestation
- Suitable for use with Compressed Air Foam Systems (CAFS)

# FIRE PERFORMANCE APPROVALS

Aberdeen Foam 1% Class A concentrate meets the requirements of:

• EN 1568:2008 Part 1 • EN 1568:2008 Part 3







# PHYSICAL PROPERTIES

PRITSICAL PROPERTIES	
Appearance	Clear yellow liquid
Specific gravity	1.02 - 1.03
рН @ 20°С	7.0 - 8.0
Viscosity (Brookfield) @ 20°C (mPas)	15-25
Viscosity (Brookfield) @ -5°C (mPas)	<120
Surface tension @ 20°C (N/m)	<30
BOD/COD <sub>5</sub>	>65%
Low expansion index @ 0.3% *	<u>&gt;</u> 7
Low expansion index @ 1.0% *	> 8
25% drainage - low expansion (minutes)	> 3
Medium expansion index @ 0.5%*	<u>&gt;</u> 60
Medium expansion index @ 1.0%*	> 100
25% drainage - medium expansion (minutes)	> 2
Wetting time - 0.3% fresh water (minutes)	< 20
Freezing point (°C)	-16
Max. storage temp. (°C)	50
Min. storage temp. (°C)	-15
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.

# **FOAMING PROPERTIES**

Foam expansion properties will vary depending on several factors including:

- Using salt or fresh water
- 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% Class A concentrate provides quality protection wherever Class A materials (ie. tyres, paper, wood) present a fire risk.

Suitable of use at Class B minor incidents such as small hydrocarbon liquid spill fires.

### **PROPORTIONING EQUIPMENT**

Aberdeen Foam 1% Class A 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
- Compressed Air Foam Systems (CAFS)

# DISCHARGE EQUIPMENT

Aberdeen Foam 1% Class A concentrate is suitable for use with:

- Foam chambers
  Helicopter buckets
- 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% Class A can be safely disposed of in biological waste water treatment systems.

## PROPORTIONING INFORMATION

Use between the following proportions:

- Helicopter buckets: 0.3 0.6% (between 3-6 parts foam concentrate to 997-994 parts water)
- Handline air-aspirating nozzles: 0.3 0.5% (between 3-5 parts foam concentrate to 997-995 parts water)
- Handline non-air-aspirating nozzles: 0.3 0.6% (between 3-6 parts foam concentrate to 997-994 parts water)
- Compressed Air Foam Systems (CAFS): 0.1 0.3%
  (between 1.2 parts foam Systems (CAFS): 0.1 0.3%
- (between 1-3 parts foam concentrate to 999-997 parts water) • Use in fire breaks or small hydrocarbon fires: 1.0%
- (1 part foam concentrate to 99 parts water)

• Proportioning rates will vary depending on the quality of the foam blanket required and are given for guidance only.

### **ENVIRONMENTAL IMPACT**

- Water based Classified as readily biodegradable
- Fluorine free Low toxicity to aquatic life
- Not classified as hazardous to the environment

## **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
- RFP vinyl ester epoxy resin only

If kept in the original manufacturer's supplied container and stored between -15°C and 50°C, a shelf life of at least 15 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.

## COMPATIBILITY

Our laboratory tests have shown Aberdeen Foam 1% Class A concentrate is compatible in all proportions with other high quality aqueous film forming foams and ABC and BC fire fighting powders.

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

Different types of foam concentrates - for example Class A and Protein Foams - should never be mixed.

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

### **INSPECTION AND TESTING**

As recommended by NFPA11, BS.EN 13565-2:2009 and BS 5306, 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: www.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 Aberdeen Foam is manufactured in Scotland under ISO 9001 and ISO 14001 accredited management systems and audited by UL every four months.

### **PACK SPECIFICATIONS**

Aberdeen Foam concentrates are available in the following sizes:

Capacity	20L	25L	200L	1000L	Bulk tank
Dimensions (cm)	399 x 294 x 245	470 x 294 x 245	920 x 581 x 581	102 x 100 x 116	TBC
Empty weight (kg)	0.8	0.9	8	60	TBC
Filled weight (kg)	22.2	27.6	222	1130	TBC

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.





