# ABERDEEN FOAM



# High Expansion Fire Fighting Foam



A versatile, high quality High Expansion Foam concentrate for use with both medium and high expansion foam equipment.

Used at a concentration of 2%, Aberdeen 2% HI-EX produces very stable foams for control of Class A and Class B fires in confined spaces.

Quickly extinguishes and secures Class A fires of material such as paper, wood and tyres and Class B hydrocarbon fires of liquids such as crude oil, gasoline, aviation kerosene and fuel oil.

Suitable for use in both tropical and cold climates, with maximum and minimum storage and use temperatures of 50°C and -15°C.

Not suitable for use on fuels which are polar solvents and water miscible such as alcohols, ketones, aldehydes and ethers, or for the con trol of pooled liquid fires in the open.

# FIRE PERFORMANCE ACCREDITATION

Aberdeen Foam 2% HI-EX concentrate has been independently tested and is accredited to the following international standards:

- EN 1568: 2008 Parts 1&2
- MED 2014/90/EU

• IMO MSC / Circ.670: 1995

# **FEATURES**

Aberdeen Foam 2% HI-EX produces a very stable foam for combating Class A and Class B fires.

Provides three dimensional fire control and ideal for use in the total flooding of confined areas, such as:

- Cellars and basements
- Aircraft hangar systems
- Ships holds

- LNG tank storage bunds
- Machinery rooms and voids
- Ship engine rooms

Warehouses

With medium expansion foam equipment, Aberdeen Foam 2% HI-EX offers advantages over Low Expansion Foams in the control of cryogenic flammable liquid fires or as a vapour suppression foam on toxic liquid spills.

Formulated for use with either fresh or seawater.

Also suitable for use for training purposes.





#### PHYSICAL PROPERTIES

Appearance	Clear yellow liquid
Specific gravity	1.04
pH @ 20°C	7.5 - 8.5
Viscosity @ 20°C mPa.s	<30
Viscosity @ 0°C mPa.s	<60
Freezing point (°C)	<-15
Lowest use temp. (°C)	-10
Max. storage temp. (°C)	50
Min. storage temp. (°C)	-10
Freeze/thaw effect	None

#### **FOAMING PROPERTIES**

Expansion properties will vary depending on factors including:

- Using salt or fresh water
- Water hardness
- Equipment characteristics
- Equipment flow rate

Always check your equipment's operation manual for guidance.

# **EXPANSION PROPERTIES (TYPICAL)**

HIGH EXPANSION: expansion ratio	400
HIGH EXPANSION: 25% drainage	>4m
MEDIUM EXPANSION: expansion ratio	>110
MEDIUM EXPANSION: 25% drainage	>9m
LOW EXPANSION: expansion ratio	>9
LOW EXPANSION: 25% drainage	>8m

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.

# **ENVIRONMENTAL IMPACT**

- Biodegradable fully biodegradable in 28 days
- Water based • Fluorine free
- Not classified as hazardous to the environment

#### **APPLICATIONS**

Aberdeen Foam 2% HI-EX concentrate provides quality protection against Class A and Class B fires. Designed for use in the total flooding of fire areas such as:

- Cellars and basements
- Warehouses
- Aircraft hangar systems
  Machinery rooms and voids
- LNG tank storage bunds
  Ships holds and engine rooms

Used with medium expansion foam equipment, Aberdeen Foam 2% HI-EX is suitable for use for vapour suppression of toxic liquid spills or for controlling cryogenic flammable liquid fires.

# PROPORTIONING EQUIPMENT

Aberdeen Foam 2% HI-EX concentrate is designed for use with:

- Low expansion foam equipment (for indirect application)
- Medium expansion foam equipment
- · High expansion foam equipment

# **DISCHARGE EQUIPMENT**

Aberdeen Foam 2% HI-EX 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

# **PACK SPECIFICATIONS**

Aberdeen Foam concentrates are available in the following sizes:

Capacity	20L	25L	200L	1000L	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	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.

### PROPORTIONING INFORMATION

• 2 parts foam concentrate to 98 parts water

#### STORAGE AND SHELF LIFE

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

- Stainless steel (Type 304L or 316L)
- High density cross-linked polyethylene
- FRP vinyl ester epoxy resin only

If kept in the original manufacturer's supplied container and stored between -10°C and 50°C, a shelf life of at least 10 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.

#### **DISPOSAL**

Produced Aberdeen Foam 2% HI-EX can be safely disposed of in biological waste water treatment systems.

#### **COMPATIBILITY**

Our laboratory tests have shown Aberdeen Foam 2% HI-EX concentrate is compatible in all proportions with other high quality High Expansion 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 HI-EX 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 NFPA 11 and BS.EN 13565-2:2009, 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: 2015 and ISO 14001: 2015 accredited management systems and audited by UL every four months.

# **PACK SIZES**

Available in the following sizes:

20 litre, 25 litre, 200 litre, 1000 litre containers and bulk tanks







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