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

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear yellow liquid</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.04</td>
</tr>
<tr>
<td>pH at 20°C</td>
<td>7.5 - 8.5</td>
</tr>
<tr>
<td>Viscosity @ 20°C mPa.s</td>
<td>&lt;30</td>
</tr>
<tr>
<td>Viscosity @ 0°C mPa.s</td>
<td>&lt;60</td>
</tr>
<tr>
<td>Freezing point (°C)</td>
<td>&lt;-15</td>
</tr>
<tr>
<td>Lowest use temp. (°C)</td>
<td>-10</td>
</tr>
<tr>
<td>Max. storage temp. (°C)</td>
<td>50</td>
</tr>
<tr>
<td>Min. storage temp. (°C)</td>
<td>-10</td>
</tr>
<tr>
<td>Freeze/thaw effect</td>
<td>None</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Expansion Type</th>
<th>Expansion Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH EXPANSION</td>
<td>400</td>
</tr>
<tr>
<td>MEDIUM EXPANSION</td>
<td>&gt;110</td>
</tr>
<tr>
<td>LOW EXPANSION</td>
<td>&gt;9</td>
</tr>
</tbody>
</table>

Expansion properties will vary depending on factors including:
• Type of foam concentrate
• Water hardness
• Equipment characteristics
• Equipment flow rate

ENVIROMENTAL 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:
• Cells 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 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 from:
• 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

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

PACK SPECIFICATIONS

Aberdeen Foam concentrates are available in the following sizes:

<table>
<thead>
<tr>
<th>Capacity</th>
<th>20L</th>
<th>25L</th>
<th>200L</th>
<th>1000L</th>
<th>Bulk tank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (cm)</td>
<td>40 x 29.5 x 24.5</td>
<td>47 x 29.5 x 24.5</td>
<td>92 x 58 x 58</td>
<td>102 x 100 x 116</td>
<td>TBC</td>
</tr>
<tr>
<td>Empty weight (kg)</td>
<td>0.8</td>
<td>0.9</td>
<td>8</td>
<td>60</td>
<td>TBC</td>
</tr>
<tr>
<td>Filled weight (kg)</td>
<td>22.2</td>
<td>27.6</td>
<td>222</td>
<td>1130</td>
<td>TBC</td>
</tr>
</tbody>
</table>

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.