

## Description

Forede AFFF 3% is an aqueous film forming foam concentrate (AFFF) consisting of fluorocarbon and hydrocarbon surfactants blended with various solvents, preservatives and stabilisers. The foam forms an aqueous film that rapidly cuts off the oxygen supply and knocks down the fire. The expanded foam, from which the film is drained, forms a stable blanket that suppresses the release of flammable vapours and cools down the fuel surface extinguishing the fire and preventing reignition. The low surface tension of the water-foam solution enables the aqueous film, although heavier than the burning liquid, to float on top of the liquid surface. Forede AFFF 3% should be used at 3% proportioned solution (3 part concentrate in 97 parts of water) in brackish, fresh or sea water. It may also be stored as a premix solution in fresh water.



## Application Forede

AFFF 3% is intended for use on class B hydrocarbon fuel fires such as oil, diesel and aviation fuels. It can be used with both aspirating and non-aspirating discharge devices. Forede AFFF 3% is especially suited whenever rapid fire knock-down is essential. It is compatible with all dry chemical powders and can be used in powder/foam twin agent systems.

## Fire Performance & Foaming

The fire performance of this product has been measured and documented according to "International Approvals" stated in this document. Has been tested to and found to comply with Lastfire Protocol with good results. The foaming properties are depending on equipment used and other variables such as water and ambient temperatures. Average expansion ratio  $7.6 \pm 1$ , average  $\frac{1}{4}$  drainage time 3.3 (  $1 \pm 20\%$ ) minutes under testing.

## Proportioning

Forede AFFF 3% can easily be proportioned at the correct dilution using conventional equipment such as:

- Inline inductors
- Balanced pressure, variable flow proportioning systems
- Foam Bladder tanks
- Around the pump proportioning systems
- Water turbine driven foam proportioners
- Self inducting branch pipes, nozzles and monitors

The equipment should be designed to the foam type.

## Compatibility

Contact one of the Forede sales team with questions.

## Technical data

<b>Appearance</b>	Clear pale yellow liquid
<b>pH</b>	7.8~8.2
<b>Surface Tension</b>	18.7 mN/m
<b>Spreading Coefficient</b>	4.2~4.3 mN/m
<b>Viscosity @ 20° C</b>	≤ 20 mPas
<b>Expansion Ratio</b>	$7.6 \pm 1$
<b>25% Drainage Time</b>	3.3 ( $1 \pm 20\%$ ) min
<b>Freezing point</b>	-35°C

## Environmental impact

Forede AFFF 3% is formulated using raw materials specially selected for their fire performance and their environmental profile. Forede AFFF 3% is biodegradable. The handling of spills of concentrate or foam solution should however be undertaken according to local regulations. Normally sewage systems can dispose foam solution based on this type of foam concentrate, but local sewage operators should be consulted in this respect.

## Storage / Shelf life

Stored in original unbroken packaging the product will have a long shelf life. Shelf life in excess of 10 years will be found in temperate climates. As with all foams, shelf life will be dependent on storage temperatures and conditions. If the product is frozen during storage or transport, thawing will render the product completely usable. Synthetic foam concentrates should only be stored in stainless steel or plastic containers. Since electrochemical corrosion can occur at joints between different metals when they are in contact with foam concentrate, only one type of metal should be used for pipelines, fittings, pumps, and tanks employed in the storage of foam concentrates. We recommend following our guidelines for storage and handling ensuring favourable storage conditions.

## Packaging

We supply this product in 25 liter cans, 50 liter drums and 200 liter drums, 1000 liter IBC containers or in bulk available.

- 25L drum, 24 drums/ pallet,
- 480 drums/ 20' FCL, 792 drums/ 40' FCL
- 200L drum, 4 drums/ pallet,
- 80 drums/ 20'FCL, 132 drums/ 40' FCL

Liter Per Piece	Packaging	Approx Shipping Weight
25 Liters	Plastic Can	27 kg
50 Liters	Plastic Drum	55 kg
200 Liters	Plastic Drum	210 kg
1000 Liters	IBC Container	1100 kg

## Approvals

CCC & ISO9001