

Description

FOREDE® Alcohol Resistant Aqueous Film Forming Foam Concentrates (AR-AFFF) is a high efficiency multi purpose film forming foam. The main advantage of FOREDE® AR-AFFF is the 3% induction ratio on ALL class B fires including polar solvents, in fresh or seawater. Characteristics for film forming foam are that it spreads rapidly across a fire. As a result, it is highly effective against hydrocarbon fires. Adding special polymers ensures it is also highly effective against polar solvents. The low surface tension of the water foam concentrate solution enables the aqueous film, which is heavier than the burning liquid, to float on top of the hydrocarbon liquid surface. When applied on polar solvents a polymeric membrane makes it possible for the foam blanket to extinguish effectively.



Application

FOREDE® AR-AFFF is intended for use on class B hydrocarbon fuel as well as on polar solvent e.g. Isopropanol, Methanol and other foam destroying fuels such as MTBE. It uses only half the quantity to extinguish polar solvent fires in comparison to the traditional foam concentrates. It can be used with both aspirating and non-aspirating discharge devices.

Fire Performance & Foaming

FOREDE® AR-AFFF has been designed to give the best properties of:

- Aqueous film forming foam
- Alcohol resistant foam

The fire performance of this product has been measured and documented according to "International Approvals" stated in this document. The foaming properties are depending on equipment used and other variables such as water and ambient temperatures. Average expansion ratio 7.1 ± 1 , average $\frac{1}{4}$ drainage time 10.5 ($1 \pm 20\%$) minutes under testing.

Proportioning

FOREDE® AR-AFFF 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
- Mobile Equipments
- 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

Appearance	Clear pale yellow liquid
pH	7.7~7.9
Surface Tension	18.0 mN/m
Spreading Coefficient	4.9~5.0 mN/m
Interfacial tension	2 mN/m
Expansion Ratio	7.1
25% Drainage Time	10.5 min
Freezing point	-35°C

Environmental impact

FOREDE® AR-AFFF is formulated using raw materials specially selected for their fire performance and their environmental profile. FOREDE® AR-AFFF 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.

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