



Alcoseal FFFP AR 3x3

Alcoseal FFFP AR 3x3 is a superior quality Alcohol Resistant Film-Forming FluoroProtein (AR-FFFP) fire fighting

foam concentrate for extinguishing and securing flammable hydrocarbon and polar solvent liquid fires.

A protein base material provides a tough cohesive foam blanket with high resistance to heat that provides the same post-fire security as a top quality FluoroProtein (FP). Fluorochemical surface active agents combined with the protein base produce a vapoursealing aqueous film on hydrocarbons that provides the same fast control and extinguishment as a top quality synthetic AFFF. On polar solvents an insoluble polymer membrane is formed which protects the foam blanket from the solvent.

- Stable and long-lasting foam blanket for excellent burnback resistance and post-fire security.
- Foam blanket re-seals when ruptured by personnel or equipment.



ANGUS FIRE

Features

- Highly versatile
- Film-forming on hydrocarbons for fast flame knockdown and extinguishment
- Detergent-free for high resistance to fuel pick-up

Environment

Alcoseal FFFP AR 3x3 is based on a natural protein foaming agent and contains no harmful synthetic detergent or glycol ether.

Applications

Alcoseal FFFP AR 3x3 is the ideal fire fighting foam to use in high risk situations where hydrocarbons (such as crude oil, gasoline, diesel fuel, aviation kerosene) and/or polar solvents (such as alcohols, ketones, esters, and ethers) are stored, processed, or transported. It is used extensively by industrial and municipal fire departments.

Alcoseal FFFP AR 3x3 provides a vapoursuppressing foam blanket on spills of hazardous liquids.

Approvals and Listings

Alcoseal FFFP AR 3x3 has numerous approvals and UL Listings against Underwriters Laboratories Standard UL 162 (7th Edition).

Independently Tested and Certified to EN1568:2008 Parts 3 & 4.

Equipment

Alcoseal FFFP AR 3x3 is intended for use at 3% (3 parts concentrate to 97 parts of water) on hydrocarbons and polar solvents.

Alcoseal FFFP AR 3x3 is readily proportioned using conventional foam proportioning equipment.

Alcoseal FFFP AR 3x3 can be used with air aspirating discharge devices such as low expansion branchpipes, monitors, top pourer sets.

Exceptional resistance to fuel contamination makes it ideal for forceful application on to hydrocarbon storage tank fires from ground-based mobile monitors or via base (sub-surface) injection systems.

Alcoseal FFFP AR 3x3 can be used with nonaspirating discharge devices such as spray/fog branchpipes and nozzles, monitors, and spray/fog sprinklers. Non-aspirated application is not recommended as the primary method of attack for major fires.

Compatibility

Alcoseal FFFP AR 3x3 is suitable for use in combination with:

- Soft or hard, fresh, brackish or sea water.
- Dry powder extinguishing agents either separately or as twin agent systems.
- Expanded protein-based or synthetic foams for application to a fire in sequence or simultaneously.

Storage

Alcoseal FFFP AR 3x3 is exceptionally stable in long-term storage. A shelf-life of at least ten years can be expected if it is stored properly.

Disposal

For fire water runoff and accidental spillage please refer to Angus Fire's Foam Disposal Guide and MSDS for more information.

Reliability

Alcoseal FFFP AR 3x3 is produced to rigorous quality control standards to ensure consistent fire performance and excellent product reliability. Angus Fire operates a quality management system which complies with the requirements of BS EN ISO 9001.



Can 25 litres



Drum 200 litres



Container 1000 litres



EN1568:2008
Parts 3 & 4

Typical Physico-Chemical Properties

Appearance	Dark brown liquid
Specific gravity @ 20°C (68°F)	1.11
pH @ 20°C (68°F)	6.6 - 7.6
Viscosity	Non-Newtonian
Maximum continuous storage temperature	50°C (122°F)
Effect of freeze/thaw	No performance loss
Lowest use temperature	1.7°C (35 °F)
Sediment as shipped	≥ 0.1 % v/v
Sediment after ageing	≥ 0.5 % v/v
Alcoseal FFFP AR 3x3 is a Non-Newtonian fluid that is pseudoplastic (shear thinning)	

Typical Foam Properties:

These vary depending on the performance characteristics of the foam.
When tested in accordance with UK Defence Specification 42-41 it gives the following typical properties

Induction rate	3%
Expansion ratio	≥ 7:1
25% drainage time minutes	≥ 5

