Syndura

Fluorine Free Foam (F3) Concentrate

- Outstanding performance
- Ideal for civilian and military airport fire services
- Exceptionally stable in long-term storage

The world's first operational Fluorine Free Foam (F3) concentrate for extinguishing and securing flammable hydrocarbon liquid fires.

For many years fluorine compounds have been used as ingredients in high performance foams such as AFFF. Their unique properties have made them essential for providing rapid extinguishment of life threatening fires such as those encountered at aircraft crashes.

More recently, however, concerns have been expressed about the potentially harmful long-term effects of fluorine compounds on the environment.

In response to these concerns Angus Fire has become the first manufacturer to successfully eliminate fluorine compounds from high performance foam without incurring a significant reduction in operational effectiveness. Fluorinefree foam technology has now become a reality!

- World's first operational Fluorine Free Foam (F3) for minimal environmental impact.
- Ideal for civilian and military airport fire services.
- Fully approved to UL 162, ICAO Level A, UK Def Stan 42-42, and EN 1568-3.
- Outstanding performance in realistic aircraft crash fire tests carried out by UK Defence Fire Service.
- Exceptionally stable in long-term storage.

Applications

SYNDURA is the ideal foam for fire professionals currently prohibited by environmental regulations from using fluorine-based foams in nonemergency applications. This is currently causing operational difficulties in the aviation and military sectors with vehicle testing and training exercises.

Approvals

The fire performance of SYNDURA is measured primarily against Underwriters Laboratories Standard UL 162 (7th Edition). It is UL Listed for use on hydrocarbon fires through portable and fixed foammaking equipment.

Approved to International Civil Aviation Organization (ICAO) Level A.

Meets the fire performance requirements of UK Ministry of Defence Standard 42-42 and the European foam standard EN 1568-3 : 2000.

Demonstrated outstanding performance in realistic aircraft crash fire tests carried out by the UK Defence Fire Service. On a fully involved 280m^2 fire involving 2,500 litres of aviation kerosene with a 60 second preburn, SYNDURA achieved control in only 30 seconds and complete extinction in 50 seconds when applied with two Angus Fire 450 litre/minute portable foam branchpipes.

Equipment

SYNDURA is intended for use at 6% (6 parts concentrate to 94 parts of water) for operational fire fighting, although it may also be used at 3% in training exercises. It is suitable for use with around-the-pump foam proportioning systems, portable inductors and fixed proportioning systems. It can also be used at low, medium and high expansion.

Compatibility

SYNDURA is suitable for use in combination with:

- Soft or hard, fresh, brackish or sea water.
- Compatible with leading 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.

Foam Properties

As with any foam, the foam properties of SYNDURA vary depending on the performance characteristics of foam equipment used and the operating conditions. When tested in accordance with EN 1568-3:2000 it gives typical expansion ratios of 9 to 11:1 and 25% drainage times of 17 - 20 minutes.

Storage

SYNDURA is exceptionally stable in long-term storage. A storage life of ten years can be expected if stored properly.

Disposal

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

Reliability

SYNDURA is produced to rigorous quality control standards which ensure consistent fire performance and excellent product reliability.
Angus Fire operates a quality management system which complies with the requirements of BS EN ISO 9001:2008.

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Typical Physico-Chemical Properties	
White liquid	
pH @ 20°C	6.6 - 7.6
Specific gravity	1.00 - 1.03
Viscosity @ 20°C (Brookfield Viscometer @ 60 rpm, No.4 Spindle)	2000 - 3000 mPas
Maximum continuous storage temperature	49°C
Minimum storage use temperature	+1.7°C

Packing Specification				
	Plastic Square	Plastic Square	Plastic Cylindrical	Plastic Cylindrical
Capacity	25 litres	5 US gallons	200 litres	55 US gallons
Empty weight (kg)	1.2	0.8	9.0	9.0
Filled weight (kg)	27	22	215	224
Dimensions (mm)	s286 x 286 x 448 H	293 x 240 x 402 H	580 D x 922 H	580 D x 922 H

For emergency supplies of Syndura, phone +44 (0) 15242 61166

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