



## Technical Data Sheet

### SEAGUARD AFFF 1% FIRE FIGHTING FOAM CONCENTRATE

Seaguard AFFF 1% is a high performance aqueous film forming foam concentrate suitable for use at 1% on hydrocarbon fuels such as petrol, crude oil, diesel fuels and aviation kerosene. The Seaguard range of C6 high quality Aqueous Film-Forming Foam (AFFF) concentrates are compliant with the EPA 2010/15 PFOA Stewardship Programme. All fluorosurfactants used in the manufacture of Seaguard firefighting foams are C6 based.

#### Description

Appearance	Golden yellow liquid
Density:	1.01 ± 0.02
pH:	7.2
Surface Tension:	18.5 dynes
Viscosity:	<18 mm <sup>2</sup> sec <sup>-1</sup> @20°C
Freezing Point:	-8° C
Sediment	≤0.01 % v/v

#### Application

The 1% AFFF is an extinguishing agent that produces a stable foam blanket for fire suppression and vapour control. The foam blanket steadily releases water to cool hot fuels. The product is to be mixed at 1 part foam concentrate and 99 parts water. The foam concentrate contains C6 fluorosurfactants that produces a film forming action across the surface of the burning fuel to give a very fast knock down performance. It will generate foam through air aspirating devices to produce a foam expansion rate of between 6 : 1 and 12 : 1 depending upon the equipment.

Seaguard AFFF 1% is suitable for use through all types of fixed systems, sprinkler systems, in line proportioners (fixed or portable), branchpipes and monitors. Seaguard AFFF 1% is measured against the UK MoD 42-40 2002 Foam Liquids Fire Extinguishing (Concentrates, Foam, and Fire Extinguishing) and meets this standard.

#### Environment

Seaguard AFFF 1% is manufactured from C6 fluorosurfactants, surface active agents and foaming agents to produce a very low environmental impact. It is fully biodegradable, and the resulting foam solution can be treated in biological wastewater treatment systems.

#### Shelf Life

Seaguard AFFF 1% will store for 15 years plus, provided the product is kept under the correct storage conditions. Typically, unopened packaging will meet these conditions. The product



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has a neutral pH and can be stored in vacuum vented tanks manufactured from painted mild steel, fibreglass, stainless steel and HDPE.

### Compatibility

Seaguard AFFF 1% is chemically compatible with other major manufacturers' AFFF foam concentrate. As per NFPA 11 requirement: "Different brands of the same type shall not be mixed unless data are provided by the manufacturer". As the manufacturer of the foam concentrate, Seaguard Fire Protection states that the AFFF 1% foam concentrate is compatible with all major suppliers of 1% AFFF foam concentrate. Seaguard AFFF 1% is compatible with finished foam solutions (expanded foam) of synthetic foams such as AFFF and AR-AFFF as well as all brands of Fluoroprotein, FFFP and AR-FFFP.

Seaguard AFFF 1% is compatible with fresh, salt and brackish water (including bore water) as well as dry chemical powders and twin agent systems.

### Packaging

The liquid concentrate comes in the following:

- 20 litre pail
- 200 litre drum
- 1000 litre IBC

### Foam Properties

Expansion Ratio	≥7: 1
25% Drainage Time	≥ 3mins 30 secs

### Seaguard C6 Firefighting Foams

The Seaguard range of C6 high quality Aqueous Film-Forming Foam (AFFF) concentrates are compliant with the EPA 2010/15 PFOA Stewardship Programme. All fluorosurfactants used in the manufacture of Seaguard firefighting foams are C6 based. Seaguard fluorosurfactants are sourced in Australia and have been tested and approved for use by NICNAS in Australia. Ref: NICNAS – National Industrial Chemical Notification and Assessment Scheme

The FPAA has released a bulletin "Selection and use of firefighting foams", May 2020, which states C6 foams may contain trace levels of PFOA, which are unavoidably produced by the manufacturing process, but these foams are acceptable under the US EPA PFOA Stewardship program and the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation (EU) 2017/1000, see Clauses 8.1.2 and 8.1.3."