

## AFF FOAM CONCENTRATE (3%)

**1. DESCRIPTION.-** AFFF compound for extinction of class A and class B (hydrocarbon) fires. It contains fluorinated and hydrocarbon surfactants in order to allow the formation of an aqueous film on the surface of most hydrocarbon fuels, reducing vapour leaks and preventing the contact with the oxygen.

**2. USE.-** It may be used with low expansion foam equipment (nozzles, monitors, foam chambers, etc), non-aspirating devices (water spray nozzles and standard sprinklers) and medium expansion foam branches.

**3. DOSAGE.-** The dilution rate is 3% in fresh or sea water. It may be proportioned with standard equipment (in-line inductors, bladder tanks, balanced pressure systems, etc) and special purpose ones for AFFF agents (e.g. Hydrofoam nozzles).

**4. SPECIFICATIONS.-** The typical characteristics of the concentrate and foam solutions are:

CONCENTRATE		FOAM SOLUTION	
Specific gravity @ 20°C	1.02	Dilution rate	3%
pH @ 20°C	8—8.5	Surface tens. at 20°C, mN/m (Demineralsed water)	16.0±0.5
Viscosity, cone and plate, 375/75 s <sup>-1</sup> mPa.s @ 20°C	3	Interfacial tens. with cyclohexane at 20°C, mN/m	3.5 ±1.0
	@ 0°C	7	
Freezing point, °C	-5	Low Expansion Foam (EN 1568-3)	
Lowest temp. for using, °C	-4	Foam Expansion Index	9
		25% Drainage Time, min:s	3:30

**5. PACKAGING.-** The product is supplied in 20 or 25 L PE prismatic containers, 200 L PE cylindrical drums and 1.000 L IBC containers.



**6. PERFORMANCE.-** The foam achieves a very quick knock-down of fires, even with low application rates, and shows an excellent burn-back resistance. The product has **approval certification** according to **EN-1568-3:2008 (class IB with fresh water y class IC with sea water)** and it is listed according to **UL-162**. The product fulfils the **LASTFIRE** protocol for extinction of hydrocarbons in tanks, with the qualification of **GOOD** in the 3 tests: semi-aspirated, aspirated and system nozzles.

EN-1568-3:2008 approval

UL Listed

LASTFIRE approval

Standard	EN-1568-3:2008				UL-162	
	Heptane				Heptane	
Fuel	Forceful	Gentle	Forceful	Gentle	Type III	Type III
Application						
Dilution rate, %	3	3	3	3	3	3
Water	fresh	fresh	salt	salt	fresh	salt
Extinction	2:15	1:20	1:12	2:30	1:58	1:51
Burnback 25%	-	16:20	-	14:00	pass	pass
Classification	IB		IC		listed	

**7. STORAGE.-** The concentrate should be stored at temperatures between -4° and +50°C, preferably in the original containers or in stainless steel or epoxy lined tanks. Avoid permanent contact with carbon steel, iron, cooper alloys, aluminium, etc. Do not mix with other foam concentrates without a previous verification of compatibility

**8. CAUTIONS.-** Foams should not be used in contact with electrical equipments, nor with chemical products that can react with water. It is recommended to avoid the contact of the foam concentrate with the skin. In case of eye splashes wash with plenty of water. In case of ingestion do not induce vomit, drink water and take medical advice.

**9. FIREBUY.-** HYDROFILM AF-3R is included in Firebuy contract number NPFB/FO/010/03.