

AFFF-AR PSEUDOPLASTIC FOAM CONCENTRATE 1x3

1. DESCRIPTION.- AFFF compound for extinction of hydrocarbon and polar solvent fires. Concentrate with pseudoplastic behaviour. 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. On polar solvent fuels use gentle application.

3. DOSAGE.- The dilution rate is 1% in fresh or sea water for extinguishing hydrocarbon fires; and 3% for polar solvent (alcohols, ketones, ethers, esters, amines, etc) fires or when medium expansion is required. It may be proportioned with standard equipment (in-line inductors, bladder tanks, balanced pressure systems, etc) and special purpose ones for AFFF agents.

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

CONCENTRATE		FOAM SOLUTION		
Specific gravity @ 20°C	1.06	Dilution rate	1%	3%
pH @ 20°C	7—7.5	Surface tens. at 20°C, mN/m (Demineralised water)	16.0	16.0
Viscosity, cone and plate, 375/75 s ⁻¹ mPa.s @ 20°C	80/220	Interfacial tens. with cyclohexane at 20°C, mN/m	4.0	2.5
	0°C	125/320	Low Expansion Foam (EN 1568-3)	
Freezing point, °C	<-10	Foam Expansion Index	7.5	8.5
Lowest temp. for using, °C	-7	25% Drainage Time, min:s	4:00	12:00

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 certifications** according to **EN-1568-3:2008 (class IA)** and **EN-1568-4:2008 (class IA)** 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-1568-3/4:2008 approval

UL Listed

LASTFIRE approval

Standard	EN-1568-3:2008		EN-1568-4:2008				UL-162			
	Heptane		Acetone		IPA		Heptane		IPA	
Fuel	Heptane		Acetone		IPA		Heptane		IPA	
Application	Forceful	Forceful	Gentle	Gentle	Gentle	Gentle	Type III		Type II	
Dilution rate, %	1	1	3	3	3	3	1	1	3	3
Water	fresh	salt	fresh	salt	fresh	salt	fresh	salt	fresh	salt
Extinction	1:49	1:50	1:11	0:54	1:00	1:01	1:45	1:35	2:20	2:50
Burnback 25%	13:50	13:23	15:04	15:36	16:27	17:05	pass	pass	pass	pass
Classification	IA		IA				Listed			

7. STORAGE.- The concentrate should be stored at temperatures between -7° and +50°C, preferably in the original containers or in stainless steel or epoxy lined tanks. Avoid permanent contact with carbon steel, iron, copper 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.- UNIFOAM 1/3 is included in Firebuy contract number NPFb/FO/010/03.

