

# AUXQUIMIA® UNIPOL-FF™ 3/6

## FLUORINE FREE FOAM TO FIGHT FLAMMABLE LIQUID FIRES.



### DESCRIPTION

**UNIPOL-FF™ 3/6** is a foam concentrate formulated with a special combination of hydrocarbon surfactants and pseudoplastic polymers which gives excellent foaming, extinguish and burnback properties to its foam solutions.

It does not contain any organohalogenated compounds. It can be used to put out class B (liquids) and class A (solids) fires.

**UNIPOL-FF™ 3/6** has been designed to be used with low expansion nozzles and generate foams with high fluidity and slow drainage.

It is mainly used on hydrocarbon fires and could be even applied with forceful application, property until now only reserved for AFFF agents.

It can also be used on polar solvents, in this case with gentle application. The lack of fluorinated additives, which improves the anti-alcohol effect of the product, makes advisable to test it with different solvents as it may be necessary to increase the standard application rates.

Unlike the AFFF agents, it does not form an aqueous film on hydrocarbons because it does not contain fluorinated surfactants. The excellent extinguish times are possible thanks to its good foaming capacity, high water retention and great oleophobicity.



Due to the lack of this aqueous film, it is recommended to cover the fuel with a layer of foam thick enough to prevent that the fuel surface could be exposed and reignited. Its good wetting ability and great water retention make it very suitable for extinguishing Class A fires (solid) with both spray and low expansion nozzles.

**UNIPOL-FF™ 3/6** dilution rate is 3% in fresh or sea water for extinguishing hydrocarbon fires and 6% for polar solvent (alcohols, ketones, ethers, esters,

amines, etc.) fires or when medium expansion is required.

**UNIPOL-FF™ 3/6** is highly biodegradable. It performs effectively on fresh or sea water and it may be proportioned with standard equipment (in-line inductors, bladder tanks, pumps, balanced pressure systems, etc.) and special purpose ones for AFFF agents (e.g. Hydrofoam nozzles).

### SPECIFICATIONS

CONCENTRATE	
Specific gravity @ 20°C	1.045
pH @ 20°C	7.5±0.5
Viscosity, cone and plate, @ 20°C 375/75 s-1 mPa.s @ +1.7°C	95/30 115/375
Freezing point, °C	< -5°C
Lowest temperature for use, °C	+1.7°C

FOAM SOLUTION		
Dilution rate	3%	6%
Surface tens. at 20°C, mN/m (Demineralised water)	25.0	27.0
Interfacial tens. with cyclohexane at 20°C, mN/m	1.5	1.5
Low Expansion Foam (EN 1568-3)		
Foam Expansion Index	8.0	9.0
25% Drainage Time, min:s	>15:00	>20:00

**PERFORMANCE**

UNIPOL-FF™3/6 has approval certification according to the **EN-1568-3:2008** (low expansion-hydrocarbons) and EN-1568-4:2008 (polar solvents). The product is certified under the **LASTFIRE protocol with the classification of “GOOD”** for the three nozzles (Semiaspirating, Aspirating and System). The product is UL-162 listed with fixed systems. The product is listed with type II application for hydrocarbons @ 0.10 gal/ min-sq.ft and type II for polar solvents @ 0.15 gal/min-sq.ft.

STANDARD	EN-1568-3:2008		EN-1568-4:2008	
	Heptane		Acetone	IPA
Fuel	Heptane		Acetone	IPA
Application	Forceful	Gentle	Gentle	
Dilution rate, %	3	3	6	6
Water	fresh	fresh	fresh	fresh
Extinction	1:56	1:54	1:44	2:30
Burnback 25%	9:30	18:20	17:20	17:23
Classification	1B	1B	1A	11A



**PACKAGING**

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

**STORAGE**

The concentrate should be stored at temperatures between -5° 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.

**CAUTIONS**

Foams should neither be used in contact with electrical equipment 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.



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**FOR MORE INFORMATION**

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