Perimeter SOLUTIONS
Quality Products. Exceptional Response.

Trusted. Solutions That Save.

AUXQUIMIA®
UNIPOL-FF™ 3/6

FLUORINE-FREE FOAM CONCENTRATE (3%-6%)

AUXQUIMIA
Fire fighting products

DESCRIPTION

UNIPOL-FF™ 3/6 is a fluorine-free foam concentrate formulated with a special combination of hydrocarbon surfactants and pseudoplastic polymers. This formulation provides excellent foam quality with rapid control, suppression and burnback on Class B hydrocarbon and polar solvent flammable liquid fires. It can be used to control and extinguish and class B (liquids) and class A (solids and deep-seated) fires. It contains no siloxanes, and no intentionally added per- and poly-fluoroalkyl substances (PFAS) compounds, including fluorinated surfactants. Making it an environmentally responsible alternative to traditional AFFF foam agents.

UNIPOL-FF™ 3/6 has been specifically designed for effective suppression with low expansion nozzles and generate a foam blanket characterised by high fluidity, good spreadability and slow drainage. Enabling effective fuel surface coverage, vapour suppression and minimising reingition risk. On hydrocarbon liquid fuel fires it can be applied with forceful application. It can also be used on polar solvents, in this case with gentle application. It is optimised for use with low, medium and high expansion foam nozzles and discharge devices, including fixed and mobile equipment.

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 due to its good foaming capacity, high water retention and great oleophobicity. As no aqueous film is formed, it is recommended to apply sufficient foam to establish a continuous, cohesive foam blanket, preventing fuel surface exposure, suppressing vapour release, minimising the risk of reignition, and ensuring long-term burnback resistance. 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.

APPLICATIONS

UNIPOL-FF™ 3/6 is designed for a dilution rate of 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.As well as suppressing and extinguishing deep seated Class A fires, providing operational flexibility across a wide range of industries.

It can be used with low, medium, and high expansion foam equipment. Is compatible with standard foam proportioning such as in-line inductors, bladder tanks, balanced pressure systems, foam pumps, and fixed system proportioners. And can be used through various aspirated and non-aspirating devices, discharge devices such as handline nozzles and monitors, foam chambers and foam bund pourers, as well as foam/water sprinkelrs and CAFS (Compressed Air Foam Systems).

UNIPOL-FF™ 3/6 is non-persistent and highly biodegradable., reducing environmental impact in comparison to conventional fluorinated foam concentrates

CERTIFICATIONS

UNIPOL-FF™ 3/6 has been the subject of multiple large-scale fire testing programs. Results include:

- Passed and certified to European Standard EN-1568:2018 Part 1 for use with medium-expansion foam discharge devices
- Passed and certified to European Standard EN-1568:2008 Part 1 & 2 for use with medium- and high expansion foam discharge devices
- Tested and Certified to European Standard EN-1568:2008 Part 3 & 4 on all fuels with fresh and sea water
  -EN1568 part 3: IB/IC (at 3%)
  -EN1568 part 4: IA/IB on Acetone & IIA/IIA on IPA (at 6%)
- UL-162 listed with fixed systems. Listed with Type II application:
  -Hydrocarbons @ 0.10 gal/ min·sq.ft
  -Polar solvents @ 0.15 gal/min·sq.ft.
- LASTFIRE batch-certified as ACCEPTABLE /GOOD/GOOD3 nozzles (semi, asp, system)

EN 1568
Part 1, 2, 3 & 4

UL

LASTFIRE
Large Atmospheric Storage Tank Fires

AUXQUIMIA® UNIPOL-FF™ 3/6

FLUORINE-FREE FOAM CONCENTRATE (3%-6%)

USAGE RATE

The proportioning rate is 3% for hydrocarbons and 6% for polar solvents. It is used at 1% on Class A fuel fires.

TYPICAL PROPERTIES		
Specific gravity @ 20°C		1.045
pH @ 20°C		7.5±0.5
Viscosity, mPa.s/cPs at 375s-1*	@ 20°C	100
Freezing point, °C		< -5°C
Lowest temperature for use, °C		+1.7°C

* Brookfield cone/plate

TYPICAL FOAM PROPERTIES		
Dilution rate	3%	6%
Surface tens. at 20°C, mN/m (Demineralised water)	25.0	27.0
Low Expansion Foam (EN 1568-3)		
Foam Expansion Index	7.0	9.0
25% Drainage Time, min:s	>15:00	>20:00

INSPECTION

UNIPOL-FF™ 3/6 or a premix solution should be tested annually per National Fire protection Association (NFPA 11) and EN-13565-2 standards. A sample of the foam sent to the manufacturer or qualified third party lab to confirm physical properties and foam quality meet the specifications of the foam as originally supplied as per the requirements of NFPA 11 and EN-13565-2.

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/MATERIAL COMPATIBILITY

UNIPOL-FF™ 3/6 should be stored between -5°C and +50°C, preferably in the original containers.The foam concentrate has been successfully tested and verified under multiple temperature conditioning stability cycles at -30 °C to +60 °C, with no adverse effects. AUXQUIMIA UNIPOL-FF 3/6 is not affected by freeze–thaw conditions and will return to the original, effective state upon thawing without any degradation in performance. AUXQUIMIA UNIPOL-FF 3/6 is compatible with multiple materials of construction found in firefighting equipment. Do not mix with other foam concentrates without a previous verification of compatibility. For questions about material of construction compatibility consult Perimeter Solutions technical services. The foam concentrate shelf life is maximized by proper storage conditions and maintenance.

Factors affecting shelf life are wide temperature fluctuation, evaporation, dilution, and contamination by foreign materials. When stored in original containers or in manufacturer-recommended equipment within the specified temperature range the shelf life of the product is rated to exceed 10 years.

ENVIRONMENTAL

UNIPOL-FF™ 3/6 is siloxane-free and contains no intentionally added PFAS, fluorosurfactants, fluoropolymers, organohalogens, PFCAs, PFOA and no PFOS in accordance with EU Directive. Presents no concern for persistence, bioaccumulation or toxic breakdown (No PBT profile).

⚠ CAUTIONS

Foams should not be used in contact with electrical equipment or with chemical products that can react with water. It is recommended to avoid contact of the foam concentrate with skin. In case of eye splashes, wash with plenty of water. In case of ingestion do not induce vomiting, drink water and seek medical advice.

Contains no intentionally added PFAS.

FOR MORE INFORMATION

Contact any of our worldwide Perimeter Solutions Fire Safety offices or visit:
www.Perimeter-Solutions.com

UNITED STATES
1520 Brookfield Avenue
Green Bay, WI 54313
Tel: +1 (920) 593-9445
salesfoamusa@perimeter-solutions.com

EMEA
Polígono Industrial de Baiña, Parcela 23
33682 Baiña-Mieres (Asturias) – Spain
Tel: +34 985 24 29 45
salesfoamemea@perimeter-solutions.com

ASIA PACIFIC
3 Charles Street
St Marys NSW 2760 – Australia
Tel: +61 2 9673 5300
salesfoamapac@perimeter-solutions.com

perimeter-solutions.com

A-33018003-3