



# Fomtec® LS aMax

## FOMTEC LS aMax

Fomtec LS aMax is an alcohol resistant aqueous film forming foam concentrate (AFFF) multipurpose and high expansion foam concentrate consisting of a blend of fluorocarbon-, hydrocarbon surfactants and polymers, solvents and stabilisers. The fire suppression mechanism of Fomtec LS aMax on liquid surface fuels is utilising the foam blankets ability to block oxygen supply to the fuel and the high water content cools the fuel surface reducing the evaporation of flammable vapours. Additionally, the foam blanket prevents reignition of an extinguished fuel surface.

- Short chain C6 Pure fluorochemistry
- High Performance Multipurpose & High Expansion Foam
- Approved according to EN 1568 part 1, 2, 3 and 4 and ICAO level B
- Tested by CNPP, T12 high expansion test standard
- Documented filling height with high expansion up to 35 meters



**DESCRIPTION**

The high expansion extinguishing mechanism enables oxygen depletion in a three dimensional fire by totally engulfing the flammable material inside enclosed areas. Additionally, the high content of water in the foam will cool the flammable materials.

Large scale high expansion tests have shown that Fomtec LS aMax is capable of reaching filling heights in enclosed areas of up to 35 meters with good collapse behaviour.

Fomtec LS aMax should be used at a 3% proportioning ratio (3 parts concentrate and 97 parts water) for hydrocarbon fuels. Fomtec aMax can be stored as premix when blended with fresh water.

For use on Class A type fires, induction ratio of 0,3% to 1% is recommended depending on application and discharge device.

**APPLICATION**

Fomtec LS aMax is intended for use on class B hydrocarbon fuels such as oil, diesel, gasoline and aviation fuels as well as polar solvent fires such as IPA and acetone. Fomtec LS aMax can be used with all kinds on low, medium and high expansion devices. It is intended to be used at 3% proportioning. Fomtec LS aMax is also effective against class A fires such as wood, paper, textiles etc. at 0.3 to 1% proportioning.

Typical applications include high risk installations such as:

- high expansion foam systems in warehouses, process areas, aircraft hangars etc.
- Petrochemical and chemical industry
- Airports and ARFF-vehicles

Suitable for mobile firefighting by use of aspirating foam discharge devices such as foam branchpipes and monitors, where application rates and technique can be adjusted to the specifics of each incident. Or in systems designed for use with the product based on recommended minimum applications rates, application duration and discharge devices.

**FIRE PERFORMANCE & FOAMING**

The fire performance has been measured and documented according to the "International Approvals" stated in this document. The use of the product should follow design guidelines appropriate to the type of system and application. The foaming properties are depending on equipment used and other variables such as water and ambient temperatures. Average low expansion 8:l, average 25% drainage time 10:00 minutes using UNI 86 test nozzle.

**EQUIPMENT**

Fomtec LS aMax can easily be proportioned at the correct dilution using conventional proportioning equipment. The equipment should be designed to the foam type.

**TYPICAL DATA**

Appearance	Clear yellowish liquid
Specific gravity at 20°C	1,03 ± 0.01 g/ml
Viscosity at 20°C spindle #1, 60 rpm	Pseudoplastic*
pH	6,5 - 8,5
Freezing point	-6°C
Recommended storage temperature	-5°C - 55°C
Suspended sediment (v/v)	Less than 0,1%

\* See detailed viscosity data below.

Fomtec LS aMax can be used with low, medium and high expansion foam generators.

Used in Fomtec high expansion generators the below average values can be expected:

Generator	Expansion @ 4 bar	Expansion @ 6 bar
Fomtec Bele L	-	470:l
Fomtec Bele S 400	450:l	480:l
Fomtec Bele S 800	450:l	480:l

**COMPATIBILITY**

Fomtec LS aMax is suitable for all water types. It is compatible with foam compatible dry chemical powders as well as other expanded foam types.

For mixing with other concentrates, contact Fomtec for advise and guidance. For material compatibility please refer to our Fomtec Technical Advices FTA 20 addressing the topic.

**ENVIRONMENTAL**

Fomtec LS aMax is formulated using raw materials specially selected for their fire performance and their environmental profile. All raw materials are registered in the European REACH-database. Fomtec LS aMax is non-toxic, biodegradable and each individual component is fully tested and documented.

Fomtec only uses C6 Pure fluoro-surfactants and polymers in our AFFF-ARC formulations. Our film forming (AFFF-ARC) products contains no PFOS or PFOA in accordance with US EPA Stewardship Programme 2010/15 and EU Directive 2017/1000. More details can be found in the Material Safety Datasheet (MSDS).

The disposal of spills of foam concentrate or premix foam solution should be made in accordance with local regulations. For more detailed information please consult our Fomtec Technical Advices FTA 40.

**STORAGE / SHELF LIFE**

Stored in original unbroken packaging the product will have a long shelf life. Shelf life in excess of 10 years will be found in temperate climates. As with all foams, shelf life will be dependent on storage temperatures and conditions. For storage recommendations and material compatibility please refer to our Fomtec Technical Advices FTA 10 addressing the topic.

**INSPECTION/TESTING/ MAINTENANCE**

All foam concentrates should be tested annually. Testing should be carried out by an approved laboratory certified to assess firefighting foam quality according to relevant standards, such as NFPA 11, EN 13565-2, EN 1568 and IMO MSC.I.Circ. 1312. Storage containers should be inspected and reevaluated for the suitability of the storage location regarding temperature fluctuations (temperature should be as stable as possible). Exposure to direct sunlight should be avoided.

**PACKAGING**

We supply this product in 25 litre and 5 US gallon cans, 200 litre and 55 US gallon drums, 1000 litre and 265 US gallon IBC containers. Larger bulk supply is available against special request.



Volume per piece	Packaging	Part no	Approx. shipping weight*	Dimensions (mm) L x W x H
25 ltr	Can	11-3600-01	27,0 kg	295 x 260 x 441
200 ltr	Drum	11-3600-02	214,5 kg	581 x 581 x 935
1000 ltr	Container	11-3600-04	1090 kg	1200 x 1000 x 1150
5 US gal.	Can	11-3600-XX	20,4 kg	295 x 260 x 441
55 US gal.	Drum	11-3600-XX	223,5 kg	581 x 581 x 935
265 US gal.	Container	11-3600-XX	1095 kg	1200 x 1000 x 1150
Bulk	Special request	11-3600-XX		

\* including packaging.

**INTERNATIONAL APPROVALS**

- EN 1568 part 1, Pass
- EN 1568 part 2, Pass
- EN 1568 part 3,  
 Class IA fresh water, IB sea water
- EN 1568 part 4  
 Acetone: Class IB fresh water, IA sea water  
 IPA: Class IA fresh water, IA sea water
- Tested to CNPP T12
- ICAO Level B

**VISCOSITY DATA - FLOW CURVES**

The viscosity flow curves are determined by Brookfield RST rheometer from low to high shear rates. The viscosity curves below are determined by calculating the average value of at least 8 different measurements and add a safety margin of three standard deviations to the average. The viscosity curves are determined for 20°C and 5°C. In the table below the kinematic viscosity (mm<sup>2</sup>/s) is calculated as dynamic viscosity (mPa·s) divided by the specific gravity of the concentrate.

Shear Rate (s <sup>-1</sup> )	Dynamic Viscosity (mPa·s) 20°C	Dynamic Viscosity (mPa·s) 5°C	Kinematic Viscosity (mm <sup>2</sup> /s) 20°C	Kinematic Viscosity (mm <sup>2</sup> /s) 5°C
10.7	3797	3814	3669	3685
21.5	2169	1442	2096	1394
53.7	927	685	896	662
107.4	487	395	470	382
214.8	273	240	264	232
375.0	175	166	169	160
537.0	128	131	124	127
1074.0	92	92	89	89
1611.0	56	64	54	62
2148.0	45	54	44	52
2792.2	54	67	52	65

