
COMPRESSED AIR FOAM DATASHEET

DAFO FOMTEC (C6) 3% AFFF FOAM CONCENTRATE (EUROPE)



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Document no's

Revision: -

Features

- Approvals UL Listed, ULC Listed, FM Approved
- Tested, Listed and Approved with Sprinklers.
- Excellent firefighting on Class B hydrocarbon fires
- For use in high risk applications such as warehouses, offshore installations, oil and chemical tankers, petrochemical and chemical plants.

Description

Fomtec AFFF 3% S is an aqueous film forming foam concentrate (AFFF) consisting of fluorocarbon and hydrocarbon surfactants blended with various solvents, preservatives and stabilizers.

The foam forms an aqueous film that rapidly cuts off the oxygen supply and knocks down the fire. The expanded foam, from which the film is drained, forms a stable blanket that suppresses the release of flammable vapors and cools down the fuel surface extinguishing the fire and preventing reignition.

The low surface tension of the water-foam solution enables the aqueous film, although heavier than the burning liquid, to float on top of the liquid surface.

Fomtec AFFF 3% S should be used at 3% of the solution volume (3 parts concentrate in 97 parts of water) in brackish, fresh or sea water. It may also be stored as a premix solution in fresh water.

Application

Fomtec AFFF 3% S is intended for use on class B hydrocarbon fuel fires such as oil, diesel and aviation fuels as well as class A fires such as wood, paper, textiles etc. Refer to FM Approval Guide and UL Listing for approved fuel hazards and application rates. It can be used with both aspirating and non-aspirating discharge devices. Fomtec AFFF 3% S is especially suited whenever rapid fire knock-down is essential. It is compatible with all dry chemical powders and can be used in powder/foam twin agent systems, this statement is not verified by UL or FM.

Fire Performance & Foaming

The fire performance of this product has been measured and documented according to "International Approvals" stated in this document. The foaming properties are depending on equipment used and other variables such as water and ambient temperatures. Average expansion 8:1, average ¼ drainage time 03:00 minutes using UNI 86 test nozzle.

Proportioning

Fomtec AFFF 3% S can easily be proportioned at the correct dilution using conventional equipment such as:

- Inline inductors
- Inline Balanced Pressure, proportioning systems (ILBP)
- Bladder tanks and ratio controllers
- Around the pump proportioning systems

- Water motor or turbine foam proportioners

- Self inducing branch pipes and nozzles

Refer to the FM Approval Guide and UL Listing for proportioning equipment approved for use with this concentrate.

Compatibility

Contact one of the Fomtec sales team with questions.

Sprinkler application

Sprinkler applications are especially challenging for any foam due to the very low operating pressure and the very low expansion reached. Applying foam through a sprinkler is a very forceful application method and requires foam that can handle direct application and partial submersion into the fuel without losing its fire performance and burnback resistance. Foams that shall be regarded as suitable for Sprinkler applications shall also be able to withstand limited time of water deluge directly onto the foam blanket without losing its burnback properties. Fomtec AFFF 3% S has passed these tests showing very good extinguishing and burnback properties. Refer to the FM Approval Guide and UL Listing for acceptable system configurations used with this concentrate and specific sprinkler SINs and their associated minimum application rates.

The Fomtec AFFF 3% S is ideal for all High risk applications where any type of discharge outlet may be in use such as:

- Petrochemical and chemical plants
- Offshore installations
- Oil tankers
- Tank Farms
- Warehouses

Technical data

Appearance	Clear to yellowish liquid
Specific gravity at 20°C	1,02 +/- 0.01 g/ml
Viscosity at 25°C spindle #2, 60 rpm	5,5 mPas +/- 2
Viscosity at 20°C spindle #2, 60 rpm	6 mPas +/- 2
Viscosity at 2°C spindle #2, 60 rpm	8 mPas +/- 2
pH	6,0 +/- 0,5
Freezing point	-3°C
Recommended storage temperature	-3 to 55°C
UL/FM temperature range*	1,7 to 49°C
Suspended sediment (v/v)	Less than 0,2%
Surface tension	≤ 18,0 dynes/cm

*This product is tested according to FM and UL-standard and has passed the specific circumstances in the test.



Environmental impact

Fomtec AFFF 3% S is formulated using specially selected raw materials, selected for their fire performance and their environmental profile. Fomtec AFFF 3% S is biodegradable. It contains only C6 fluorotemomers. The handling of spill of concentrate or foam solutions shall however be made according to local regulations. Normally sewage systems will have no problem with a 3% foam solution based on Fomtec AFFF 3% S, but local sewage operators should be consulted in this respect. Our C6 foams contain no PFOA and no PFOS, in accordance with US EPA Stewardship Programme 2010/15 and EU Directive 2006/122/EC and amended Council Directive 76/769/EEC. Full details will be found in the Material Safety Datasheet (MSDS).

Storage / Shelf life

Stored in original unbroken packaging the product will have a long shelf life. Shelf life of 10-20 years will be found in temperate climates. As with all foams, shelf life will be dependent on storage temperatures and conditions. If the product is frozen during storage or transport, thawing will render the product completely usable.

Synthetic foam concentrates should only be stored in stainless steel or plastic containers. Since electrochemical corrosion can occur at joints between different metals when they are in contact with foam concentrate, only one type of metal should be used for pipelines, fittings, pumps, and tanks employed in the storage of foam concentrates. We recommend following our guidelines for storage and handling ensuring favourable storage conditions.

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 and in bulk on special request.

International Approvals

- Underwriters Laboratories, UL 162 7th edition
Refer to the UL Listing for systems and devices that are approved for use with this concentrate. Refer to the system and device data sheets from Viking or KCA, NFPA 11, and relevant local standards for correct system design.
- ULC listed
- FM Approved
Refer to the FM Approval Guide for systems and devices that are approved for use with this concentrate. Refer to the system and device data sheets from Viking or KCA, NFPA 11, FM Global Property Loss Prevention Data Sheets, and relevant local standards for correct system design. FM Approval of the foam extinguishing system is contingent upon the design, installation, testing and maintenance performed in accordance with NFPA 11 and/or FM Global Property Loss Prevention Data Sheet 4-12, Foam/Water Sprinkler Systems.

Inspection/Testing/ Maintenance

The foam concentrate should be tested annually. The testing should be made by a suitable laboratory for analysis of foam concentrates and should measure: pH, specific gravity, expansion, drainage time as per NFPA 11 annex D or Fomtec test procedure 1304, film formation test as per FM 5130 point 4.5 or Fomtec test procedure 1306, and viscosity as per FM 5130 Appendix J or Fomtec test procedure 1305. Storage containers should be inspected and reevaluated for the suitability of the storage location in regards to temperature fluctuations (temperature should be as stable as possible). Exposure to direct sunlight should be avoided.

Volume per piece	Packaging	Part no	Approx. Shipping weight*	Dimensions (mm) L x W x H
25 ltr	Can	10-3021-01	26,7 kg	295 x 260 x441
200 ltr	Drum	10-3021-02	212,5 kg	581 x 581 x 935
1000 ltr	Container	10-3021-04	1080 kg	1200 x1000 x1150
5 US gal.	Can	10-3021-06	20,58 kg	295 x 260 x 441
55 US gal.	Drum	10-3021-07	220,66 kg	581 x 581 x 935
265 US gal.	Container	10-3021-08	1083,6 kg	1200 x1000 x1150
Bulk	Special request			

*including packaging

