



Foam Concentrate

ARC 3x3 S



Volume	Reference
25	ARC3X3S/25
200	ARC3X3S/200
1000	ARC3X3S/1000



Description

Viking ARC 3x3 S is an ultra high efficiency multi purpose film forming foam (3x3).

Viking ARC 3x3 S shall be used at 3% induction ratio on both hydrocarbon and polar solvents fires using fresh, brackish or sea water.

The film forming characteristics of Viking ARC 3x3 S means that it spreads rapidly across a fire. As a result, it is highly effective against hydrocarbon fires and with the addition of special polymers it is also highly effective against polar solvents. The low surface tension of the water foam concentrate solution enables the aqueous film, although heavier than the burning liquid, to float on top of the hydrocarbon liquid surface.

When applied on polar solvents a polymeric membrane makes it possible for the foam blanket to extinguish effectively. This works on foam destroying liquids such as pure MTBE or Gasoline mixed with MTBE.

Viking ARC 3x3 S should be used at 3% proportioned solution.

Application

Viking ARC 3x3 S is intended for use on class B hydrocarbon fuel as well as on polar solvent, i.e. Isopropanol, Methanol etc. and other foam destroy-ing product fires such as MTBE. It can be used with both aspirating and non-aspirating discharge devices. It is compatible with all dry chemical powders.

Sprinkler Applications

Viking ARC 3x3 S has been tested according to the Underwriters Laboratories Standard UL 162 using standard sprinkler heads K 80 and K115. 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 head is a very forceful application method and require a foam that can handle direct application and partial submersion into the fuel without losing its fire performance and burn-back 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 burn-back properties. This test is performed on the foam during the Heptane test. Viking AFFF 3x3 S has passed these tests showing very good extinguishing and burn-back properties.

The fire performance of Viking ARC 3x3 S has been tested according to UL 162 7th edition using type II and type III discharge outlets.

Viking AFFF 3x3 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 and Chemical tankers
- Tank Farms
- Warehouses



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Fire Performance & Foaming

The fire performance of Viking AFFF 3% S has been tested and documented according to Lastfire, UK Ministry Of Defence Standard 42/40 and Underwriters Laboratories Standard UL 162 – 7th Edition as well as Factory Mutual (FM) 5130

Foaming index no less than 7:1 (normally 8:1). 25% drainage time 3.0 minutes (normally 3.5).

Proportioning

Viking ARC 3x3 S can easily be proportioned at the correct dilution using conventional equipment such as:

- In-line inductors.
- Balanced pressure, variable flow proportioning systems.
- Bladder tanks.
- Around the pump proportioning systems.
- Water turbine driven foam proportioners.
- Self inducting branch pipes and nozzles.

The equipment should be designed to the foam type.

Technical data

Appearance	Clear Yellow Liquid
Specific gravity @ 15.6°C	1.06 +/- 0.01 g/ml
Brookfield Viscosity approx @ 20°C	1700 mPa.s
pH	7.5 +/- 1.0
Undissolved solids (v/v)	Less than 0.2 %
UL listed storage temperature	-6.7 °C
Surface tension approx	17.5 dynes/cm

Environmental Information:

Viking AFFF 3x3 S is formulated using specially selected raw materials, selected for their fire performance and their environmental profile. Viking AFFF 3x3 S is biodegradable. 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 Viking AFFF 3x3 S, but local sewage operators should be consulted in this respect.

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. The recommended storage temperature range of Viking ARC 3x3 S is from -6.7°C to 49°C. 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. 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 electromagnetic 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.

Packaging:

Viking AFFF 3x3 S can be supplied in 25 litre cans and 200 litre drums. We can also ship in 1000 litre containers or in bulk.

International Approvals:

- Underwriters Laboratories, UL 162 7th edition 