Foam Concentrate

FFFP 3%

Volume	Reference
25	FFFP3/25
200	FFFP3/200
1000	FFFP3/1000

Foam Concentrates

Description

Viking FFFP 3% is a film forming fluoroprotein foam concentrate (FFFP) containing hydrolysed protein and preservatives, together with a blend of fluorinated surfactants to achieve the maximum synergistic effect. The blend of fluorochemicals selected is effective in reducing the surface tension of water as well as the interfacial tension between water and oil sufficiently low to give stable film on the surface of the fuel and as a result it gives fire extinguishing rates superior to those obtained with synthetic based compounds. Incorporation of protein in the formulation produces a thick visible blanket which has exceptional burnback resistance.

Viking FFFP 3% should be used as a 3% proportioned solution in fresh or sea water. The correct proportioning or mixture ratio is 3 parts of concentrate and 97 parts of water.

Application

Viking FFFP 3% is intended for use on B class hydrocarbon fuel fires such as oil, petroleum and aviation fuels. Viking FFFP 3% can be applied directly onto the fire surface and is also suitable for subsurface injection. It is compatible with all dry powders and can be used in dry powder/foam twin agent systems.

Fire Performance & Foaming

The fire performance of Viking FFFP 3% is measured against standards such as United Kingdom Ministry of Defence Standard 42-40 at 3% concentration The expansion will vary depending on the performance characteristics of the equipment used. When tested to DEF 42-40 at 3% concentration, the expansion will be at least 7:1 (normally 8:1) with a 25% drainage time of not less than 3.5 minutes (normally 4.5 minutes).

Datasheet Created
2011-04-19

Foam Concentrate

FFFP 3%

Proportioning

Viking FFFP 3% 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.

Technical data

Appearance	**Dark brown liquid**
Specific gravity @ 20°C	**Minimum 1.17 g/ml (+/- 0.01)**
Viscosity approx. @ 20°C	**< 20 cSt**
pH	**7.5 +/- 1.0**
Freezing point	**- 17°C**
Pour point	**- 15°C**
Suspended sediment (v/v)	**Less than 0.25 %**
Surface tension (dynes/cm)	**18.0 approx**
Interfacial Tension	**< 4 mN/m**

Storage/Shelf Life

Stored in original unbroken packaging the product will have a long shelf life. The recommended storage temperature range of Viking FFFP 3% is from –15°C to 49°C and shelf life in excess of 5 years will be found in temperate climates. As with all protein based materials, shelf life will be dependant on storage temperatures and conditions. If the product is frozen during storage or transportation, thawing will render the product completely usable.

Viking FFFP 3% may be stored in plastic or metal containers. For bulk storage, mild steel tanks may be used provided the internal surface is coated with a protective coating such as bitumen. The use of galvanised material should be avoided for storage vessels and pipe work involving the concentrate.

Packaging

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

International Approvals

- EN 1568 part 3, Class 1/A

Datasheet Created 2011-04-19