

Project: Fire Extinguishing Media to
EN 1568-3 Specifications

Certificate Number: MCH 9902150/09A

Client: Dafo Fomtec AB
PO Box 683
135 26 Tyresö
Sweden

Office: Liverpool

Client's Order Number:

Date: 10 May 2001

Order Status: Complete

Inspection Dates

First: 20.08.99

Final: 10.09.99

This certificate is issued to Dafo Fomtec AB to certify that at their request, the undersigned Surveyor to this Society did select samples of FOMTEC AFFF 6%F, for the purpose of confirming that the properties were within the technical specifications and were in accordance with EN 1568-3.

The necessary tests were witnessed by the Surveyor and the results obtained were all within the limits given in the manufacturers specification, and the requirements of EN 1568-3.

Tolerance to freezing and thawing (Annex E)

No stratification or non-homogeneity could be detected in the sample.

Sediment (Annex C)

Before ageing of the sample	=	<0.1%
After ageing of the sample (24 hours at 60°C)	=	<0.1%

Viscosity at 20°C	=	2.2 c.st
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pH of the concentrate at 20°C	=	7.75
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Surface Tension, Interfacial Tension and spreading coefficient (Annex F)

	<u>Surface Tension</u> Dynes/cm	<u>Interfacial Tension</u> Dynes/cm	<u>Spreading Coefficient</u> Dynes/cm
Before conditioning	17.2	1.5	+6.3
After conditioning at - -30°C for 24 hrs followed by 48hrs at 20°C (four cycles)			
Top Sample	17.0	1.5	+6.5
Bottom Sample	17.7	1.5	+5.8
After conditioning at - 60°C for 7 days followed by 2 days at 20°C			
Top Sample	17.6	1.4	+6.0
Bottom Sample	17.5	1.4	+6.1

Expansion and Drainage (Annex G)

Before conditioning of the sample

Expansion =

25% Drainage time =

Fresh

9.3

3'31"

Sea

8.8

4'00"

After conditioning of the sample
in accordance with Annex E

Expansion =

25% Drainage time =

Fresh

Top

9.5

3.36"

Bottom

8.8

3.23"

Sea

Top

8.6

3'55"

Bottom

8.4

4'07"

Fire Tests (Annex H)**A) Forceful Application in accordance with EN 1568-3**

Fire tests carried out in accordance with Annex H1 and H3 using:-

Fresh water and Sea water

Preburn time

60 seconds

Foam application

180 seconds

Wait after foam application

300 seconds

Fire tray

144B (4.5m²)

Fuel

Commercial Heptane on water bed

	Fresh Water		Sea Water
90% Control	49"	40"	40"
99% Control	80"	65"	55"
100% Extinction	176"	168"	135"
25% Burnback time	N/A	N/A	N/A

Air Temp	15°C	17°C	13°C
Water Temp	18°C	19°C	18°C
Fuel Temp	20°C	19°C	18°C
Foam Temp	20°C	20°C	19°C
Wind Speed (m/sec.)	<1.0	<1.0	<1.0

B) Gentle application in accordance with EN 1568-3

Fire Tests carried out in accordance with Annex H1 and H2 using:-

Fresh water and Sea water

Preburn time	60 seconds
Foam application	300 seconds
Wait after foam application	300 seconds
Fire tray	144B (4.52m ²)
Fuel	Commercial Heptane on water bed

	Fresh Water		Sea Water
90% Control	47"	42"	38"
99% Control	70"	76"	67"
100% Extinction	88"	152"	190"
25% Burnback time	13'21"	13'48"	13'10"


Air Temp	23°C	20°C	20°C
Water Temp	19°C	19°C	20°C
Fuel Temp	19°C	19°C	20°C
Foam Temp	19°C	19°C	19°C
Wind Speed (m/sec.)	<1.0	<1.0	<1.0

From the above test results it is confirmed that FOMTEC AFFF 6%F is a film forming foam concentrate suitable for use at 6% concentration with potable and sea water. FOMTEC AFFF 6%F has tolerance to freezing and thawing (Annex E). The product is suitable for storage above -30°C. The fire extinguishing performance class is 1 and the burnback resistance level is C using potable water and B using sea water.

Performance level achieved:

Extinguishment class 1

Burnback resistance level C

for 
 M. Firth
 Senior Surveyor