

Project: Fire Extinguishing Media to
EN 1568-3 Specifications

Certificate Number: MCH 9902151/1

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% ICAO, 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	=	2.5 c.st
-------------------	---	----------

pH of the concentrate at 20°C	=	7.5
-------------------------------	---	-----

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	1.6	+6.2
After conditioning at - -30°C for 24 hrs followed by 48hrs at 20°C (four cycles)			
Top Sample	17.2	1.5	+6.3
Bottom Sample	17.5	1.6	+5.9
After conditioning at - 60°C for 7 days followed by 2 days at 20°C			
Top Sample	17.5	1.5	+6.0
Bottom Sample	17.4	1.6	+6.0

Expansion and Drainage (Annex G)

Before conditioning of the sample		Fresh	Sea		
Expansion =		8.0	7.5		
25% Drainage time =		3'20"	3'35"		
		Fresh	Sea		
After conditioning of the sample	Top	Bottom	Top	Bottom	
in accordance with Annex E					
Expansion =		8.2	8.3	7.7	7.8
25% Drainage time =		3'25"	3.35"	3'24"	3'32"

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	40"	43"	47"
99% Control	70"	79"	68"
100% Extinction	175"	175"	110"
25% Burnback time	N/A	N/A	N/A

Air Temp	16°C	16°C	15°C
Water Temp	15°C	15°C	15°C
Fuel Temp	15°C	15°C	15°C
Foam Temp	17°C	17°C	17°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	98"	78"	55"
99% Control	145"	100"	90"
100% Extinction	190"	173"	167"
25% Burnback time	11'05"	11'45"	15'04"
Air Temp	16°C	16°C	16°C
Water Temp	16°C	16°C	16°C
Fuel Temp	17°C	17°C	18°C
Foam Temp	16°C	16°C	16°C
Wind Speed (m/sec.)	<1.0	<1.0	<1.0

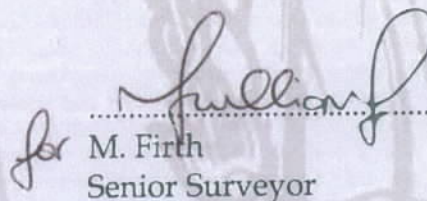
From the above test results it is confirmed that FOMTEC AFFF 6 % ICAO is a film forming foam concentrate suitable for use at 6 % concentration with potable and sea water. FOMTEC AFFF 6% ICAO has tolerance to freezing and thawing (Annex E).

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


 M. Firth
 Senior Surveyor