

Project: Fire Extinguishing Media to EN 1568-3
Specification

Client: Dafo Fomtec AB

Office: Liverpool

Clients Order Number:

Date: 17 April 2003

Order Status: Complete

Inspection Dates

First: 10 April 2003

Final: 17 April 2003

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 MB5, manufactured for the purpose on confirming that the properties were within the technical specifications and were in accordance with EN1568-3

The necessary tests were witnessed by the Surveyor and the results obtained were all within the limits given in the manufacturer's specification, and the requirements of EN1568-3.

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	=	2.0 cSt
-------------------	---	---------

pH of the concentrate at 20°C	=	7.0
-------------------------------	---	-----

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	+27.8	N / A	N / A
After Conditioning - -30°C for 24 hrs followed by 48 hrs at 20°C (four cycles)	Top Sample Bottom Sample	+27.0 +27.7	N / A N / A
After conditioning - 60°C for 7 days followed by 2 days at 20°C	Top Sample Bottom Sample	+27.8 +28.0	N / A N / A

Expansion and Drainage (Annex G)

	Fresh		Sea	
Before conditioning of the sample				
Expansion =	10.0		8.0	
25% Drainage time =	7'02"		3'02"	
After conditioning of the sample				
In accordance with Annex E	Top	Bottom	Top	Bottom
Expansion =	9.7	10.0	7.8	8.2
25% Drainage time =	6'49"	7'11"	2'52"	3'08"

Fire Tests (Annex H)

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

	Fresh Water	Sea Water	
90% Control	35"	46"	40"
99% Control	55"	80"	70"
100% Extinction	138"	217"	200"
25% Burnback time	16'05"	11'21"	10'15"
Air Temp (°C)	10.5	10.0	9.0
Water Temp (°C)	13.6	13.5	13.0
Fuel Temp (°C)	13.6	14.5	14.0
Foam Temp (°C)	14.0	14.0	14.0
Wind Speed (m/sec)	<0.5	<0.5	<0.5