



Test Report - Fire Extinguishing Media to EN 1568-3:2008 Specification

Office: **Helsingborg**

Date: **03 July 2012**

This certificate is issued to **DAFO Fomtec AB, Helsingborg, Sweden**

to certify that at their request the undersigned Surveyor to this society did attend their premises at Garnisonsgatan 47A and the test site of "Falck Nutek" Esbjerg, Denmark for the purpose of selecting samples of FOMTEC P 6% to confirm that the properties were in accordance with the requirements of EN 1568-3: 2008.

The necessary tests were witnessed and the results obtained were all within the limits given in EN 1568-3:2008.

Report:

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 = < 0.25%
 After ageing of the sample (24 hours at 60 °C) = < 0.25%

Viscosity at 20 °C = 10.7 mPa.s

pH of the concentrate at 20 °C = 6.7

Surface Tension, Interfacial Tension and Spreading Coefficient (Annex F)

	Surface Tension (mN/m)	Interfacial Tension (mN/m)	Spreading Coefficient (mN/m)
Fresh Water			
Before Conditioning	46,0	15,0	-36,0
After Conditioning Top Sample	42,1	11,0	-28,1
After Conditioning Bottom Sample	49,0	18,5	-42,5
Sea Water			
Before Aging	44,8	14,0	-33,8
After Conditioning Top Sample	46,0	12,5	-33,5
After Conditioning Bottom Sample	46,0	13,5	-34,5

Expansion and Drainage (Annex G)

	Expansion	Drainage Time
Fresh Water		
Before Conditioning	5,6	3 min. 45 sec.
After Conditioning Top Sample	5,4	3 min. 40 sec.
After Conditioning Bottom Sample	5,5	4 min. 10 sec.
Sea Water		
Before Conditioning	5,1	4 min. 45 sec.
After Conditioning Top Sample	5,6	4 min. 45 sec.
After Conditioning Bottom Sample	5,6	4 min. 40 sec.

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Fire Tests (Annex H)

B) Gentle Application in accordance with EN 1568-3

Air Temperature: 15 °C
Water Temperature: 15 °C
Fuel Temperature: 15 °C
Premix Temperature: 15 °C
Wind Speed: < 3 m/s
Preburn Time: 1 min.
Foam Application: 5 min.
Waiting Period: 5 min.
Fire Tray: 144B (4,5 m²)

	Fresh Water	Sea Water	Sea Water (repeat)
90% Control	1 min 30 sec	1 min 35 sec	1 min 35 sec
99% Control	2 min 30 sec	2 min 35 sec	2 min 05 sec
Extinction	4 min 11 sec	4 min 04 sec	4 min 03 sec
25% Burnback Time	> 15 min 00 sec	> 15 min 00 sec	> 15 min 00 sec

From the above test results it is confirmed that FOMTEC P 6% is a protein based foam suitable for use at 6% concentration with both potable and sea water.

Fomtec P 6% has tolerance to freezing and thawing (Annex E). The product is suitable for storage above -30°C. The fire extinguishing performance is Class III and the burnback level is B using potable and sea water.

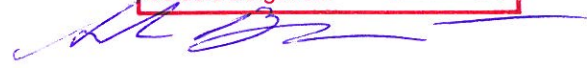
Performance Level Achieved:

Extinguishment: Class III
Burnback Resistance Level: B

Conclusion

From the above test results it is confirmed that the physical data and fire performance of FOMTEC P 6% are in accordance with the requirements of EN 1568-3:2008.

Client: Dafo Fomtec AB
Helsingborg, Sweden



Anders Bergström
Surveyor to Lloyd's Register EMEA

A member of the Lloyd's Register Group