



EC TYPE EXAMINATION (MODULE B)
CERTIFICATE No. MED032121XP/002

***This is to certify** that RINA Services S.p.A. (Notified Body No. 0474) did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Fire Protection requirements of Marine Equipment Directive (MED) 2014/90/EU, including the requirements and testing standards of Regulation (EU) 2020/1170.*

MED Item N°

MED/3.58

Description

**Fixed low expansion foam fire extinguishing systems
components for machinery spaces and tanker deck protection
FOMTEC AFFF 3%-45**

Type

DAFO FOMTEC AB

Applicant

Vindkraftsvagen 8
SE-135 26 Tyreso
SWEDEN

Testing standards

IMO MSC.1/Circ.1312; IMO MSC.1/Circ.1312/Corr.1

Reference standards

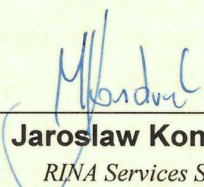
**SOLAS 74 Reg.II-2/10, IMO Res.MSC.98(73)-(FSS Code) 6, IMO
Res.MSC.98(73)-(FSS Code) 14, IMO MSC/Circ.1239, IMO
MSC.1/Circ.1276.**

Issued in Gdańsk on
July 26, 2021

This Certificate is valid until
July 25, 2026

This Certificate consists of this sheet plus an attachment




Jaroslaw Kondracki
RINA Services S.p.A.





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Manufacturer

DAFO FOMTEC AB - DAFO FOMTEC AB (Production & R&D)

Place of Manufacturer

Garnisonsgatan 47A
SE-254 66 Helsingborg
SWEDEN

Technical Characteristics

Foam Concentrate FOMTEC AFFF 3%-45	
Type of foam concentrate	Aqueous Film Forming Foam (Newtonian)
Mixing Ratio	3%
Specific gravity [g/ml]	1.025
Viscosity at 20°C [mPas]	<20
pH at 20°C	6.5 - 8.5
Min. usage temperature [°C]	- 45
Max. usage temperature [°C]	+ 55
Expansion at 20 °C	8.9
Drainage 25% [min]	4' 11"
Use Concentration	AFFF 3% -45 aqueous film forming foam concentrate (AFFF)

Field of Application

Fixed foam fire extinguishing systems using low expansion foam concentrate for extinguishing fires of oil products and chemicals liquids as per list contained in Chapter 17 of the International Bulk Chemical Code (column L - letters A, B and D).

Test Carried Out

According to IMO MSC/Circ.582 - "*Guidelines for the performance and testing criteria and surveys of low-expansion foam concentrate for fixed fire-extinguishing systems*" and MSC/Circ.799 - "*Guidelines for the performance and testing criteria and surveys of low-expansion foam concentrates for fixed fire-extinguishing system of chemical tankers*".

Technical Documentation

- Lloyd's Register Test Report no. CPN 1620503/1 dated 14/06/2016 and filled with no. PLFP/1428,
- Fomtec AFFF 3%-45 technical data sheet dated 26/08/2016 and filled with no. PLFP1429,
- Risk Assessment Fomtec AFFF 3%-45 Ultra LT filed by RINA with n° PLFP/14347.
- Declaration of conformity issued by FOMTEC in compliance with MSC.1/Circ.1312 filed by RINA with n° PLFP/1434.

Remarks

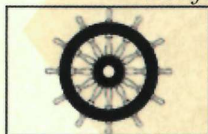
Each foam concentrate container should be marked with complete information needed to identify the liquid and confirm its intended use, in compliance with the requirement of Par. 3.13, MSC.1/Circ.1312.





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The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production control phase module (D, E or F) of Annex II of the Directive is fully complied with a written inspection agreement with a Notified Body



XXXX/YYYY

"WHEELMARK FORMAT"

XXXX *Notified Body number undertaking surveillance module*
YYYY *The year in which the mark is affixed*

General conditions for the approval

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to be allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.




Jaroslaw Kondracki

