EC TYPE EXAMINATION (MODULE B)
CERTIFICATE No. MED048224XW/001

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) 2025/1533.*

MED Item N°	**MED/3.58; MED/3.59**
Description	**Fixed low expansion foam fire extinguishing systems components for machinery spaces and tanker deck protection Expansion foam for fixed fire extinguishing systems for chemical tankers**
Type	**Fomtec Enviro 3x3 Ultra**
Applicant	**DAFO FOMTEC AB** P.O Box 683 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.; IMO Res.MSC.4(48)-(IBC Code) 11, IMO MSC/Circ.553.**

Issued in *RINA Sweden Marine*
on
October 8, 2025

This Certificate is valid until
December 19, 2028

This Certificate consists of this sheet plus an attachment

Valery Terekhov
Marine Surveyor
RINA SWEDEN AB
96715

Valery Terekhov

RINA Services S.p.A.

RINA Services S.p.A.
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000

ATTACHMENT TO CERTIFICATE No. MED048224XW/001

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

Place of Manufacturer
Garnisonsgatan 47A
SE-254 66 Helsingborg
SWEDEN

Product specification:

Fomtec® Enviro 3x3 Ultra is a novel multi-purpose alcohol resistant firefighting foam concentrate totally free from fluorinated surfactants and polymers (PFAS). The Fomtec® Enviro 3x3 Ultra is effective against hydrocarbon fires and also very effective against polar solvents.

Technical Characteristics

FOAM CONCENTRATE Fomtec Enviro 3x3 Ultra		
Mixing Ratio	3	%
Specific Gravity at 20ºC	1,035 ± 0,01	g/ml
Viscosity at 20ºC	Pseudoplastic*	
PH at 20ºC	6,5-8,5	-
Freezing point	-12	°C
Recommended storage temperature	-11 - 55	°C
Suspended sediment (v/v)	Less than 0,1	%
Surface tension	≤ 28,0	mN/m

* The detailed data on TDS Fomtec Enviro 3x3

Field of Application

This approval does not address the foam generating equipment, only the foam concentrate.

Fomtec® Enviro 3x3 Ultra is intended for use on class B hydrocarbon fuels as well as polar solvents like isopropyl alcohol, methanol, ethanol, acetone etc.

Fomtec® Enviro 3x3 Ultra can be used as low and medium expansion foam. Especially suited for use in mobile firefighting by use of aspirating foam discharge devices such as foam branch-pipes and monitors, where application rates and technique can be adjusted to the specifics of each incident. Or in systems designed for use with the product based on recommended minimum applications rates, application duration and discharge devices.

Fomtec® Enviro 3x3 Ultra is also effective against class A fires such as wood, paper, textiles etc. at 0,3% to 1% proportioning.

Technical Documentation

Technical Specification –TDS Fomtec Enviro 3x3 Ultra filed by RINA with n° PLFP/2755.
Risk Assessment Fomtec Enviro 3x3 Ultra filed by RINA with n° PLFP/2754.
EU Declaration of Conformity filed by RINA with n° PLFP/2752.

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Tests Carried Out

According to IMO MSC.1/Circ.1312 & MSC.1/Circ.1312/Corr.1- "Revised guidelines for the performance and testing criteria, and surveys of foam concentrates for fixed fire-extinguishing systems", Test report filed by RINA with n° PLFP/2753.

Note

The foam concentrate should be delivered with a declaration (i.e., Batch Certificate) of the main characteristics (sedimentation, pH value, expansion ratio, drainage time and volumetric mass). The declaration will be the basis for the annual condition test.

The storage container should be compatible with the foam concentrate throughout the service life of the foam.

This certificate annuls and replaces the certificate No. MED176523XP dated 12/20/2023 due to .

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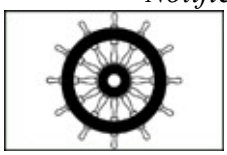
The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production control phase module (D, E or F) of Annex II of the Directive is fully complied with a written inspection agreement with a Notified Body



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 not 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.

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