

CERTIFICATE OF FIRE APPROVAL

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer Dafo Fomtec AB

Address P.O. Box 683
SE - 135 26 Tyresö
Sweden

Type DRY CHEMICAL POWDER

Description Fire Extinguishing Dry Powder for A, B and C Class Fires - Types:
"Renex ABC Standard, Renex ABC 40 and Renex ABC Forte"

Specified Standard EN 615 and EN 3 as applicable

The attached Design Appraisal Document forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

Date of issue 12 July 2013

Expiry date 11 July 2018

Certificate No. SAS F130132

Signed



Sheet No 1 of 2

Name

S. Abraham
Surveyor to Lloyd's Register EMEA
A Member of the Lloyd's Register Group

Note:

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register of any modification or changes to the equipment in order to obtain a valid Certificate.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the "Lloyd's Register". Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

DESIGN APPRAISAL DOCUMENT

Date 12 July 2013	Quote this reference on all future communications LDSO/SFS/TA/SA
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F130132

This Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Lloyd's Register Witness Certificates Nos: LIV 602582/1A3 dated 04 June 2001, MCH 9902010/1B dated 11 April 2001 and MCH 0132934/03 dated 20 June 2001

CONDITIONS OF CERTIFICATION

1. Suitable for Class A, B and C fires.
2. Renex ABC Class dry powders are based on mono ammonium phosphate and ammonium sulphate and are treated with flow promoting and moisture repellent additives. The chemical composition of the dry powders are as detailed in the table below

Chemical Composition / properties	Renex ABC Standard	Renex ABC 40	Renex ABC Forte
Dry Powder Bulk Density (g/l)	0.87	0.90	0.95
Mono Ammonium Phosphate (%)	30	40	88
Ammonium Sulphate (%)	60	55	>2.0
Water repellent and Flow promoting Additives (%)	>2.0	>1.0	>2.0

3. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype.

PLACE OF PRODUCTION

Dafo Fomtec AB
 Gamisonsgatan 47 A
 254 66 Helsingborg
 Sweden



Saji Abraham
 Surveyor
 Statutory Fire and Safety
 London Design Support Office
 Lloyd's Register EMEA

Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).