

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Surface materials and floor coverings with low flame-spread characteristics

with type designation(s)
KAE-VIP Foil

Issued to

KAEFER Schiffsausbau GmbH
Bremen, Germany

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2017/306,**

item No. MED/3.18a. SOLAS 74, Reg. II-2/3, II-2/5, II-2/6 & X/3, IMO MSC/Circ. 1120, 2000 HSC Code 7 and IMO 2010 FTP Code

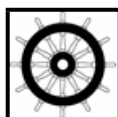
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-08-07**.

Issued at **Hamburg** on **2017-08-08**

DNV GL local station:
Bremerhaven

Approval Engineer:
John Alan Walton



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudzus
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Product description

KAE-VIP Foil is a polyurethane based laminate used as a vapour barrier and was tested with the adhesive Macroplast UK 8160 manufactured by Henkel KGaA.

Thickness of the KAE-VIP Foil is 97 microns
Weight per unit area of the adhesive is 250g/m² (wet).

Application/Limitation

Approved for use as low flame spread surface material, not generating excessive quantities of smoke nor toxic products in a fire.

Approved for use on a non-combustible substrate with thickness of 12mm or greater.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5 and to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

The product satisfies the requirement for maximum calorific value (SOLAS Chapter II-2, Reg 5.3.2.2) without further testing.

Each product is to be supplied with its manual for installation and maintenance.

Type Examination documentation

Tests carried out

Tested according to IMO FTP Code Annex 1, Part 5, in compliance with Annex 2, Para 2.2 & 2.3 without further testing and also in compliance with the IMO 2010 FTP Code Ch.8

Marking of product

The product or packing is to be marked with name and address of the manufacturer, type designation, Mark of Conformity and USCG approval number if applicable (see page 1).