

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:
Adhesives used in the construction of "A", "B" & "C" class divisions**

with type designation(s)

Loctite UK 8160 / Loctite UK 5400

Issued to

**Henkel AG & Co. KGaA
Düsseldorf, Nordrhein-Westfalen, Germany**

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

Regulation **(EU) 2020/1170,**

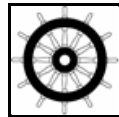
**item No. MED/3.18e. SOLAS 74, Reg. II-2/3, II-2/5, II-2/9 & X/3, IMO MSC/Circ. 1120, 2000
HSC Code 7 and IMO 2010 FTP Code**

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

This Certificate is valid until **2025-10-11.**

Issued at **Hamburg** on **2020-10-12**

DNV GL local station:
Essen



for **DNV GL SE**

Approval Engineer:
Timo Linn

Notified Body
No.: **0098**

Gerhard Aulbert
Head of Notified Body

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Job Id: **344.1-011002-1**
Certificate No: **MEDB000071V**

Product description

"Loctite UK 8160 / Loctite UK 5400"

are solvent free two component adhesives, based on polyurethane.

Mixing ratio of resin (Loctite UK 8160) and hardener (Loctite UK 5400) by weight is:

For Loctite UK 8160 / Loctite UK 5400 : 5:1.

Maximum application rate is 250 g/m² for both adhesives.

Application/Limitation

Approved for use as adhesive with low flame spread characteristics, not generating excessive quantities of smoke nor toxic products in fire.

Maximum gross calorific value shall be documented separately where applicable, ref. SOLAS Chapter II-2 Reg. 5.3.2.

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

Type Examination documentation

Test reports: PFB10033b, Serial 13502 dated 06 November 2012 from DIFT, Denmark.

Tests carried out

Tested according to IMO FTPC Part 5 and Annex 2 item 2.2 and in compliance with IMO 2010 FTP Code Ch.8.

Certificate has been renewed based on the MED B Certificate MEDB00000DF.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and MED Mark of Conformity (see below)