

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**

with type designation(s)
YB2002x/8001

Issued to

Shanghai Ningrui Chemical Engineering Co., Ltd.
Shanghai, China

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

Regulation **(EU) 2015/559,**

Annex A.1, item No. A.1/3.18e and Annex B, Module B in the Directive; SOLAS 74, Reg. II-2/3, II-2/5, II-2/6, II-2/9 & X/3, IMO MSC/Circ. 1120, 2000 HSC Code 7 and IMO 2010 FTP Code

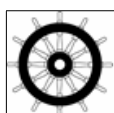
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2021-12-07**.

Issued at **Hamburg** on **2016-12-08**

DNV GL local station:
Shanghai CMC

Approval Engineer:
Marius Mörner



Notified Body
No.: **0098**

for **DNV GL SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Job Id:
Certificate No: **MEDB00001K4**

Product description

"YB2002x/8001"

Two component group polyurethane adhesive.
Applied maximum amount of adhesive.: 230g/m²

Application/Limitation

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

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

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

Type Examination documentation

Test Report No.: FT13075, dated 02.04.2013 issued by Far East Fire Testing Centre.

Tests carried out

Tested according to IMO 2010 FTP Code part 5 and Annex 2 item 2.2.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and Mark of Conformity (see page 1).