

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Adhesive**

with type designation(s)
LOCTITE UK 135 - Series

Issued to

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

is found to comply with
DNV GL class programme DNVGL-CP-0086 – Type approval – Adhesive systems

Application :

Bonding of epoxy and or polyurethane based laminates.

Issued at **Hamburg** on **2017-08-14**

This Certificate is valid until **2022-08-13**.

DNV GL local station: **Hamburg Materials & Welding**

for **DNV GL**

Approval Engineer: **Guido Michalek**

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Thorsten Lohmann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-026762-1**
Certificate No: **TAK00000XT**

Product description

Two component polyurethane resin system.

Approved variants

- LOCTITE UK 1351 B25 with LOCTITE UK 5452
- KLEBSTOFF S25¹⁾ with LOCTITE UK 5452

Type Approval documentation

- Technical Data Sheet
- Material Safety Data Sheet
- Test Report No. WP-PB-OK-A307096-001 issued by IFAM Bremen.
- Quality assurance/control documentation

Material Properties

Properties	Test Method	LOCTITE UK 1351 B25	LOCTITE UK 5452	LOCTITE UK 1352	LOCTITE UK 5400	Unit
Density at 20°C	ISO 2811-1	1.10 – 1.30	1.21 – 1.26	1.30 – 1.50	1.22 – 1.26	g/ml
Viscosity of mixture at 20°C	23501 ²⁾	400 – 500		5 - 15		Pa·s

2) Henkel internal test method

Limitation

The adhesive complies with the applicable requirements of DNV GL and is compatible to the adherends. Any significant changes in design and / or quality of the material will render the approval invalid.

Assessed production site

Henkelstraße 67
40589 Düsseldorf
Germany

Periodical assessment

A production site with a valid Approval of Manufacturer (AoM) certificate for material in question is exempted from the obligation concerning retention and renewal assessments. For manufacturer without a valid AoM a periodical assessment after 2.5 years and at renewal after 5 years is required.

Remarks

¹⁾ This system is identical with LOCTITE UK 1351 B25

This certificate supersedes the Type Approval WP 1440012 HH.

END OF CERTIFICATE