

# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAK00000YY**  
Revision No:  
**1**

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## This is to certify:

### That the Adhesive

with type designation(s)  
**Rotabond 2000**

Issued to

**Kent**  
**Flers-en-Escrebieux, France**

is found to comply with

**DNV class programme DNV-CP-0086 – Type approval – Adhesive systems**

## Application :

**Approved as class A and B flexible adhesive for bonding of e.g. insulating glass, single-pane safety glass, rails for fastening seats, door frames, single-pane polymer glass and windbreakers.**

Issued at **Hamburg** on **2022-08-08**

This Certificate is valid until **2027-08-07**.

DNV local station: **France CMC**

for **DNV**

Approval Engineer: **Joachim Rehbein**

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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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.



## Product description

**Rotabond 2000:** One component MS - polymer

## Application/Limitation

Approved as class A and B flexible adhesive for bonding of e.g. insulating glass, single-pane safety glass, rails for fastening seats, door frames, single-pane polymer glass and windbreakers.

The adhesive is in compliance with the applicable requirements of DNV and is compatible to the adherends

Any significant changes in design and / or quality of the material will render the approval invalid.

## Material properties

Item	Test method	Unit	Value
Shore A	DIN 53505	-	50,5
Fracture Strain at -20°C	DIN 53504	-	207.5
Tensile Strength at 60°C	DIN 53504	MPa	2.62
Resistance to Tear Propagation	DIN 53515	MPa	8.01
Tensile Lap Shear Strength 23°C / 50% humidity	in acc. to DIN EN 1465	MPa	0,25
Tensile Lap Shear Strength 60°C	in acc. to DIN EN 1465	MPa	0,15
Creep Test after 90 days Conditioning	in acc. to DIN EN 1465 and DIN 50017	%	20

## Type Approval documentation

- Technical Data Sheet, 2017-06-17
- Material Safety Data Sheet
- Test Report No. WP-PB-NA-304072-001 issued by Fraunhofer Institut für Fertigungstechnik Materialforschung, Bremen dated 2005-03-08.
- Quality documents issued for outgoing goods inspection
- Inspection at production site, assessment report 90.02a; dated 2017-08-31

## Marking of product

Product shall be marked with manufacturer's name and type designation.

## Periodical assessment

Periodical assessments are required after two years and after 3.5 years (retention survey) and for renewal after 5 years (renewal survey). Refer to DNV-CP-0338, Sec.4.

A production site with a valid Approval of Manufacturer (AoM) certificate for material in question is exempted from the obligation concerning periodical and renewal assessments.

This certificate is only valid if required assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE