PRODUCT DATA SHEET
Sikadur®-330

2-COMPONENT EPOXY IMPREGNATION RESIN

PRODUCT DESCRIPTION
Sikadur®-330 is a 2-component, thixotropic epoxy based impregnating resin and adhesive.

USES
Sikadur®-330 may only be used by experienced professionals. Sikadur®-330 is used as:
• Impregnation resin for SikaWrap® fabric reinforcement for the dry application method
• Primer resin for the wet application system
• Structural adhesive for bonding Sika® CarboDur® plates into slits

CHARACTERISTICS / ADVANTAGES
• Easy mix and application by trowel and impregnation roller
• Manufactured for manual saturation methods
• Excellent application behaviour to vertical and overhead surfaces
• Good adhesion to many substrates
• High mechanical properties
• No separate primer required

APPROVALS / STANDARDS
• Adhesive for structural bonding tested according to EN 1504-4, provided with the CE-mark

PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>Chemical Base</th>
<th>Epoxy resin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>5 kg (A+B)</td>
</tr>
<tr>
<td></td>
<td>Pre-batched unit</td>
</tr>
<tr>
<td>Colour</td>
<td>Component A: white paste</td>
</tr>
<tr>
<td></td>
<td>Component B: grey paste</td>
</tr>
<tr>
<td></td>
<td>Components A + B mixed: light grey paste</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>24 months from date of production</td>
</tr>
<tr>
<td>Storage Conditions</td>
<td>Store in original, unopened, sealed and undamaged packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight.</td>
</tr>
<tr>
<td>Density</td>
<td>1.30 ± 0.1 kg/l (component A+B mixed) (at +23 °C)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Shear rate: 50 /s</td>
</tr>
<tr>
<td>Temperature</td>
<td>Viscosity</td>
</tr>
<tr>
<td>+10 °C</td>
<td>~10 000 mPas</td>
</tr>
<tr>
<td>+23 °C</td>
<td>~6 000 mPas</td>
</tr>
<tr>
<td>+35 °C</td>
<td>~5 000 mPas</td>
</tr>
</tbody>
</table>
TECHNICAL INFORMATION

Flexural E-Modulus  ~ 3 800 N/mm² (7 days at +23 °C) (DIN EN 1465)
Tensile Strength  ~ 30 N/mm² (7 days at +23 °C) (ISO 527)
Tensile Modulus of Elasticity  ~ 4 500 N/mm² (7 days at +23 °C) (ISO 527)
Elongation at Break  0.9 % (7 days at +23 °C) (ISO 527)
Tensile Adhesion Strength  Concrete fracture (> 4 N/mm²) on sandblasted substrate (EN ISO 4624)
Coefficient of Thermal Expansion  4.5 × 10⁻⁵ 1/K (Temperature range −10 °C − +40 °C) (EN 1770)
Glass Transition Temperature  Curing time  Curing temperature  TG (EN 12614)
30 days  +30 °C  +58 °C
Heat Deflection Temperature  Curing time  Curing temperature  HDT (ASTM D 648)
7 days  +10 °C  +36 °C
7 days  +23 °C  +47 °C
7 days  +35 °C  +53 °C
Resistant to continuous exposure up to +45 °C.

Service Temperature  −40 °C to +45 °C

SYSTEM INFORMATION

System Structure
Substrate primer - Sikadur®-330.
Impregnating / laminating resin - Sikadur®-330.
Structural strengthening fabric - SikaWrap® type to suit requirements.

APPLICATION INFORMATION

Mixing Ratio
Component A : component B = 4 : 1 by weight
When using bulk material the exact mixing ratio must be safeguarded by accurately weighing and dosing each component.

Consumption
See the "Method Statement for SikaWrap® manual dry application" Ref 850 41 02.
Guide: 0.7 - 1.5 kg/m²

Ambient Air Temperature  +10 °C min. / +35 °C max.

Dew Point
Beware of condensation.
Substrate temperature during application must be at least 3 °C above dew point.

Substrate Temperature  +10 °C min. / +35 °C max.

Substrate Moisture Content  < 4 % pbw

Pot Life

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Pot life</th>
<th>Open time</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10 °C</td>
<td>~90 minutes (5 kg)</td>
<td>~90 minutes</td>
</tr>
<tr>
<td>+23 °C</td>
<td>~60 minutes (5 kg)</td>
<td>~60 minutes</td>
</tr>
<tr>
<td>+35 °C</td>
<td>~30 minutes (5 kg)</td>
<td>~30 minutes</td>
</tr>
</tbody>
</table>

The pot life begins when the resin and hardener are mixed. It is shorter at high temperatures and longer at low temperatures. The greater the quantity mixed, the shorter the pot life. To obtain longer workability at high temperatures, the mixed adhesive may be divided into portions. Another method is to chill components A+B before mixing them (not below +5 °C).

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY
Substrate must be sound and of sufficient tensile strength to provide a minimum pull off strength of 1.0 N/mm² or as per the requirements of the design specification.
See also the "Method Statement for SikaWrap® manual dry application" Ref 850 41 02.

SUBSTRATE PREPARATION

Also refer to SikaWrap® Technical Information Manual for dry application method” Ref 850 41 02.

MIXING

Pre-batched units:
Mix components A+B together for at least 3 minutes with a mixing spindle attached to a slow speed electric drill (max. 300 rpm) until the material becomes smooth in consistency and a uniform grey colour. Avoid aeration while mixing. Then, pour the whole mix into a clean container and stir again for approx. 1 more minute at low speed to keep air entrapment at a minimum. Mix only that quantity which can be used within its pot life.

Bulk packing, not pre-batched:
First, stir each component thoroughly. Add the components in the correct proportions into a suitable mixing pail and stir correctly using an electric low speed mixer as above for pre-batched units.

APPLICATION METHOD / TOOLS

Also refer to SikaWrap® Technical Information Manual for dry application method” Ref 850 41 02.

CLEANING OF TOOLS

Clean all equipment immediately with Sika® Thinner C. Cured material can only be removed mechanically.

LIMITATIONS

Sikadur®-330 must be protected from rain for at least 24 hours after application.
Ensure placement of fabric and laminating with roller takes place within open time.
At low temperatures and / or high relative humidity, a tacky residue (blush) may form on the surface of the cured Sikadur®-330 epoxy. If an additional layer of fabric or a coating is to be applied onto the cured epoxy, this residue must first be removed with warm, soapy water to ensure adequate bond. In any case, the surface must be wiped dry prior to application of the next layer or coating.
For application in cold or hot conditions, pre-condition material for 24 hours in temperature controlled storage facilities to improve mixing, application and pot life limits.
For further information on over coating, number of layers or creep, please consult a structural engineer for calculations and see also the "Method Statement for SikaWrap® manual dry application” Ref 850 41 02. Sikadur® resins are formulated to have low creep under permanent loading. However due to the creep behaviour of all polymer materials under load, the long term structural design load must account for creep. Generally the long term structural design load must be lower than 20-25% of the failure load. Please consult a structural engineer for load calculations for the specific application.

VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.
LEGAL NOTES

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