BUILDING TRUST

PRODUCT DATA SHEET

Sikadur®-330

Thixotropic epoxy impregnating resin for SikaWrap® structural fabrics

DESCRIPTION

Sikadur®-330 is a two-part , thixotropic, epoxy-based impregnating and laminating resin for SikaWrap® structural strengthening fabrics.

USES

Sikadur®-330 may only be used by experienced professionals.

Sikadur®-330 is used as a:
- Substrate primer for the wet application method
- Impregnating or laminating resin for SikaWrap® fabric reinforcement dry application method

Sikadur®-330 is used as a structural adhesive for:
- Sika® CarboDur® S NSM profiles into surface slots
- SikaWrap® FX anchorage cord

Please note:
- The Product may only be used by experienced professionals.
- Sikadur® resins are formulated to have low creep under permanent loading. However, due to the creep behavior 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 ¼ to ⅕ of the failure load. A structural engineer must be consulted for load calculations for the specific application.

FEATURES

- Easy to mix and apply
- Suitable for trowel and roller application
- Formulated for dry and wet manual application methods
- Vertical and overhead application
- Good adhesion to various substrates
- Good mechanical properties
- No primer required

SUSTAINABILITY

- Environmental Product Declaration (EPD) in accordance with EN 15804. EPD independently verified by Institut für Bauen und Umwelt e.V. (IBU)
- Contributes towards satisfying Indoor Environmental Quality (EQ) Credit: Low-Emitting Materials under LEED® v4 — 1–3 points
- Contributes towards satisfying Materials and Resources (MR) Credit: Building product disclosure and optimization — Environmental Product Declarations under LEED® v4 — 1 point
- Contributes towards satisfying Materials and Resources (MR) Credit: Building Product Disclosure and Optimization — Material Ingredients under LEED® v4 — 1 point
- VOC emission classification GEV Emicode EC1^{plus}

CERTIFICATES AND TEST REPORTS

- CE marking and declaration of performance based on EN 1504-4:2004 Products and systems for the protection and repair of concrete structures — Structural bonding
- CE marking and declaration of performance based on EN 1504-4:2004 Products and systems for the protection and repair of concrete structures — Structural bonding
- Certificate of Technical Valuation, CSLLPP, Certificate No. 259/2023
- Czech Republic: Technical Approval, ITC, Nr. STO-AO 224-1012/2020/a
- National Technical Assessment Sika CarboDur® kit, ITB, Approval No. ITB-KOT-2018/0414 v.2
- Possibility to coat strengthening EN 1504-2, EN ISO 2409, Sikagard®-5500 over CarboDur® and SikaWrap®
- Russia: Technical Certificate SikaWrap®, No. 6477-22
- Slovakia: Technical Assessment, TSUS, No. SK04-ZSV-2669
- Technical Agreement, CTPC, No. 016-01/488-2022
- Technical Approval Sika CarboDur, Nr. IBDiM-KOT-2019-0361 v.2

- Technical Approval, CSTB, Avis Technique, Approval No. 3.3/19-1005_V3
- Technical Approval, DIT, No. N604R/19
- Test Report, Ministry of Regional Development (Ukraine), No. 3HT–219–2167.13-001
- Test Report, University of Belgrade, No. 368/2019
- Water Regulations NSF/ANSI 61, Sikaflex®-1a, UL, Report No. FDNP.MH17464

PRODUCT INFORMATION

Composition

Epoxy resin

Packaging

Part A+B	5 kg pre-batched container
Part A (Bulk)	24 kg container
Part B (Bulk)	6 kg container

Refer to the current price list for available packaging variations.

Colour

Part A	white paste
Part B	grey paste
Parts A+B mixed	light grey paste

Shelf life

24 months from date of production

Storage conditions

The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging.
Refer to the current Safety Data Sheet for information on safe handling and storage.

Density

Mixed resin ~1.30 ± 0.1 kg/L
Value at +23 °C

Viscosity

Shear rate: 50/s

Temperature	Viscosity
+10 °C	~10 000 mPa·s
+23 °C	~6 000 mPa·s
+35 °C	~5 000 mPa·s

TECHNICAL INFORMATION

Modulus of elasticity in flexure	Cured for 7 days at +23 °C	3 800 N/mm²	(DIN EN 1465)
Tensile strength	Cured for 7 days at +23 °C	~30 N/mm²	(EN ISO 527-2)
Modulus of elasticity in tension	Cured for 7 days at +23 °C	~4 500 N/mm²	(EN ISO 527-2)
Tensile strain at break	Cured for 7 days at +23 °C	0.9 %	(EN ISO 527-2)
Tensile adhesion strength	Concrete fracture (> 4 N/mm²) on sandblasted substrate		(EN ISO 4624)
Coefficient of thermal expansion	Linear expansion between -10 °C and +40 °C	~4.5 × 10^{-5} 1/K	(EN 1770)

Service temperature

Maximum	+45 °C
Minimum	–40 °C

Glass transition temperature

Curing time	Curing temperature	TG	
30 days	+30 °C	+58 °C	(EN 12614)

Heat deflection temperature (ASTM D648)

Curing time	Curing temperature	HDT
7 days	+10 °C	+36 °C
7 days	+23 °C	+47 °C
7 days	+35 °C	+53 °C

Resistant to continuous exposure +45 °C.

APPLICATION INFORMATION

Mixing ratio

Part A : Part B = 4 : 1 by weight

Consumption

Guide: ~0.7–1.5 kg/m²
Also refer to specific Method Statement SikaWrap® application

Material temperature

Maximum	+35 °C
Minimum	+10 °C

Ambient air temperature

Maximum	+35 °C
Minimum	+10 °C

Dew point

The substrate temperature must be at least +3 °C above dew point to reduce the risk of condensation decreasing adhesion.

Substrate temperature

Maximum	+35 °C
Minimum	+10 °C

Substrate moisture content

≤ 4 % parts by weight
The following test methods can be used: Sika®-Tramex meter, CM-measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).

Pot Life (ISO 9514)

Temperature	Pot life	Open time
+10 °C	~90 minutes (5 kg)	~90 minutes
+23 °C	~60 minutes (5 kg)	~60 minutes
+35 °C	~30 minutes (5 kg)	~30 minutes

The pot life begins when Parts A+B 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 smaller quantities. Another method is to chill Parts A+B before mixing (not below +5 °C).

SYSTEM INFORMATION

System structure

- Substrate primer: Sikadur®-330
- Impregnating and laminating resin: Sikadur®-330
- Structural strengthening fabric: SikaWrap® type to suit requirements

BASIS OF PRODUCT DATA

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

FURTHER DOCUMENTATION

Reference must be made to the following Sika® Method Statements:
- 850 41 02 Method Statement SikaWrap® manual dry application

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Substrates must be structurally sound and of sufficient tensile strength to provide a minimum tensile strength of 1.0 N/mm² or as required in the design specification.

MIXING

PRE-BATCHED UNIT

1. Mix part A (resin) briefly using a mixing spindle attached to a slow speed electric mixer (max. 300 rpm).
2. IMPORTANT Mix full units only.Add both parts into a clean and dry container.
3. Mix parts A+B continuously for at least 3 minutes until a uniformly coloured smooth consistency mix has been achieved
4. IMPORTANT Avoid entraining air into the mix by over-mixing. To ensure thorough mixing, pour materials into a clean container and mix again for 1 minute.

Mixing time for A+B = 4 minutes.

BULK CONTAINER

1. IMPORTANT Mix only the quantity which can be used within its pot life. Mix part A (resin) briefly using a mixing spindle attached to a slow speed electric mixer (max. 300 rpm).
2. Add both parts in the correct proportion into a suitable clean, dry container.
3. Mix parts A+B continuously for at least 3 minutes until a uniformly coloured smooth consistency mix has been achieved.
4. IMPORTANT Avoid entraining air into the mix by over-mixing. To ensure thorough mixing, pour materials into a clean container and mix again for 1 minute.

Mixing time for A+B = 4 minutes.

APPLICATION

Reference must be made to the following Sika® Method Statements:

- 850 41 02 Method Statement SikaWrap® manual dry application

IMPORTANT

Application by trained personnel

The application of this Product must only be carried out by an applicator that is trained or approved by Sika. The applicator must also be experienced in this type of application.

IMPORTANT

Strictly follow installation procedures

Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

Preconditions

For application in cold or hot conditions, pre-condition the material for 24 hours in temperature-controlled storage facilities.

Dry before application of the next layer or coating.

1. At low temperatures or high relative humidity, a tacky residue (blush) may form on the surface of the cured product. To apply an additional layer of fabric or a coating remove the residue with warm soapy water to ensure adequate bond.
2. Protect from rain for at least 24 hours after application.

For further information on number of layers or creep, consult a structural engineer for calculations.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with Sika® Colma Cleaner immediately after use. Hardened material can only be removed mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product’s suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

PT. Sika Indonesia Head Office and Manufacturing
Jl. Raya Cibinong-Bekasi Km.20
Limusnunggal-Cileungsi
Bogor 16820-Indonesia
Tel. +62 21 8230025, Fax +62 21 8230026