BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET
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COMPOSITE REINFORCING

Sikadur®-330

IMPREGNATION RESIN FOR FABRIC REINFORCEMENT

Description

Sikadur®-330 is a two-component 100 % solids, moisture-tolerant, high strength, high modulus structural thixotropic epoxy resin, ideal for vertical and overhead application.

Where to Use

- For use as an impregnating resin with SikaWrap® Hex-230 C and SikaWrap®-430 G Structural Strengthening System.
- May be used with SikaWrap® Hex-103 C and SikaWrap® Hex-100 G and other fabrics as a primer, to improve tack for vertical and overhead applications.

Advantages

- Long pot life.
- Long open time.
- Easy to mix.
- High strength, high modulus adhesive.
- Excellent adhesion to concrete, masonry, metals, wood and most structural materials.
- Fully compatible and developed specifically for the SikaWrap® System.
- High temperature resistance.
- High creep resistance under permanent load.
- High abrasion and shock resistance.
- Solvent-free, VOC compliant.
- Complies with NSF-ANSI standard 61 for potable water contact (available by special order only).

Technical Data

Packaging	5 kg (11 lb) unit [3.78 L (1 US gal.)]	
Colour	Comp. A	White
	Comp. B	Grey
Yield		
First coat	0.7 - 1.2 kg/m² (0.14 - 0.24 lb/ft²)	
Inter-layer coat	0.5 kg/m² (0.10 lb/ft²)	
Final coat	0.5 kg/m² (0.10 lb/ft²)	
Shelf Life	2 years in original, unopened packaging. Store dry between 5 and 25 °C (41 and 77 °F). Condition product between 18 and 24 °C (65 and 75 °F) before using.	
Mix Ratio	A:B = 4:1 by weight. Exact mixing ratio to be safeguarded by using scales.	

Properties at 23 °C (73 °F) and 50 % R.H.

Density (comp. A + B mixed)	1.31 kg/L (10.9 lb/US gal.)	
Viscosity	Non-sag paste	
Pot Life, 5 kg (11 lb)	10 °C (50 °F)	1 hr 30 min
	35 °C (95 °F)	30 min
Open Time	35 °C (95 °F)	30 min
Tensile Strength	30 MPa (4353 psi)	
Elongation at Break	1.5 %	
Flexural E-Modulus	3.8 GPa (55.1 x 10⁴ psi)	
Heat Distortion Resistance ASTM D648	Curing	HDT
	7 days at 10 °C (50 °F)	36 °C (97 °F)
	7 days at 23 °C (73 °F)	47 °C (116 °F)
	7 days at 35 °C (95 °F)	53 °C (127 °F)
	7 days at 10 °C (50 °F) plus 7 days at 23 °C (73 °F)	43 °C (109 °F)
VOC content	13 g/L	

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

HOW TO USE

Surface Preparation

Prepare the surface by sandblasting or grinding (CSP 3 - 4). Remove any dust or loose particles by means of an industrial vacuum cleaner. The surface must be clean, free from grease and oil and should be dry with the maximum substrate moisture content < 4 % by weight.
The surface to be bonded must be level, with no irregularities or protrusion > 0.5 mm (20 mils). Larger deviations must be levelled with Sikadur®-30, extended with oven-dried quartz sand (mix ratio 1:1 parts by volume).
The adhesive tensile strength of the substrate being strengthened must be at least 1.5 MPa (218 psi). All corners of the structure must be rounded to a radius of 10 mm (3/8 in).

Mixing

Pre-mix each component. Mix entire unit, do not batch. Add contents of component B to component A. Mix thoroughly for three (3) minutes at low speed (400 - 600 rpm) with a drill a fitted with a mixing paddle (*Jiffy* or *Exomixer®* type) until coloured streaks disappear. Pour the mixed epoxy into a clean container and mix again for approx. one (1) minute at low speed to keep air entrainment to a minimum.
Note: Pot life starts with the mixing of both components (resin and hardener). At low ambient temperature it will be longer, at elevated temperatures it will be shorter. The larger the quantity of mixed material, the shorter the pot life.

Application

When installing the SikaWrap® Hex-230 C or SikaWrap®-430 G in the dry lay-up process, cut the fabric to the desired size. Then apply the mixed Sikadur®-330 to the prepared substrate at a rate of 0.7 - 1.2 kg/m² (0.14 - 0.24 lb/ft²), depending on the surface profile, using a trowel or brush. Carefully place the fabric into the resin with gloved hands and smooth out. Work out any irregularities or air pockets with a plastic laminating roller. Let the resin squeeze out between the rovings of the fabric.

If more than one layer of fabric is required, apply an additional coat of Sikadur®-330 at approx. 0.5 kg/m² (0.10 lb/ft²) within 60 minutes at 20 °C (68 °F), and repeat fabric lay-up as explained above.

If it is not possible to apply within 60 minutes, refer to the waiting times indicated in the table below. Therefore, before laying up another layer of fabric or a protective coating, any residue or tackiness must be removed. This can be achieved by washing the surface with water and detergent using a sponge to scrub the surface. The surface should then be rinced and wiped dry prior to application of the next layer or coating (see below for waiting time). Alternatively, use the SikaWrap® Peel ply to improve surface profile (see the Product Data Sheet for more information). Apply a final seal coat of Sikadur®-330 at approx. 0.5 kg/m² (0.10 lb/ft²) over the final layer of fabric.

To prevent exposure of the strengthening fabric to direct sunlight, apply a top coat of Sikagard®-550 W Elastic, Sikagard® Color A-50 Lo-VOC or other acceptable coating. To adhere cementitious top coat systems to the cured epoxy resin, apply an additional layer of epoxy resin at 0.4 - 0.5 mm (15 - 20 mil) and broadcast the surface with quartz sand or use.

Waiting Time / Overcoatability

Products	Substrate Temperature	Minimum time	Maximum time	Usage of SikaWrap® Peel Ply
Sikadur®-330 onto cured Sikadur®-330	+10 °C	24 hours	Cured resin (older than 7 days) needs to be degreased with Sika® Epoxy Cleaner and lightly grinded with sandpaper before coating	No surface preparation is necessary, simply remove the film right before applying the second layer
	+23 °C	12 hours		
	+35 °C	6 hours		
Cured Sikadur®-330 overcoated with Sikagard® coloured coatings	+10 °C	5 days	Cured resin (older than 7 days) needs to be degreased with Sika® Epoxy Cleaner and lightly grinded with sandpaper before coating.	No surface preparation is necessary, simply remove the film right before applying the protective coating
	+23 °C	3 days		
	+35 °C	1 day		

Times are approximate and will be affected by changing ambient conditions
Always check for surface tackiness : It should not be tacky before applying a new layer or a coating.

Clean Up

Ventilate area. Confine spill. Collect with absorbent material. Dispose of the material in accordance with current, applicable local, state and federal regulations. Uncured material can be removed with Sika® Epoxy Cleaner. Cured material can only be removed mechanically.

Limitations

- Minimum/maximum substrate and ambient temperature: 10 and 35 °C (50 and 95 °F).
- Ambient temperature must be 3 °C (6 °F) above the dew point.
- Maximum service temperature is 50 °C (122 °F).
- Do not thin with solvents.
- Material is a vapour barrier after cure.
- Minimum age of concrete must be between 21 and 28 days depending on curing and drying conditions.
- Material disposal : To discard leftovers of Sikadur®-330, mix part A and B to a volume not exceeding 750 mL (25 fl. oz), allow to harden, then discard in metal pails.
- Protect the freshly applied resin from rain for a minimum of 12 hours.
- When used as a primer for SikaWrap® Hex-103 C, SikaWrap®-900 C, SikaWrap®-1400 C or SikaWrap® Hex-100 G, do not use the Sikadur®-300 to prime.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

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