

# PRODUCT DATA SHEET

## Sikadur<sup>®</sup>-300 IN

Epoxy impregnating / laminating resin for SikaWrap<sup>®</sup> structural strengthening fabrics

### DESCRIPTION

Sikadur<sup>®</sup>-300 IN is a 2-part, epoxy based impregnating / laminating resin for SikaWrap<sup>®</sup> structural strengthening fabrics.

### USES

Sikadur<sup>®</sup>-300 IN may only be used by experienced professionals.

- As an impregnating / laminating resin for the SikaWrap<sup>®</sup> fabric reinforcement wet application method
- As a substrate primer for the wet application method

### CHARACTERISTICS / ADVANTAGES

- Easy to mix
- Application by impregnation roller
- Formulated for manual or mechanical saturation methods
- Good adhesion to many substrates
- High mechanical properties
- Extra-long pot life

### PRODUCT INFORMATION

<b>Chemical base</b>	Epoxy resin	
<b>Packaging</b>	Part A+B pre-batched	5.4 kg
	Part A	4.0 kg container
	Part B	1.4 kg container
<b>Shelf life</b>	12 months from date of production	
<b>Storage conditions</b>	The Product must be stored properly in original unopened, sealed and undamaged packaging in dry conditions at temperatures between +5 °C and +40 °C. Protect from direct sunlight.	
<b>Colour</b>	Part A+B mixed	pale yellow to clear liquid
	Part A	light yellow to clear liquid
	Part B	pale yellow to clear liquid
<b>Density</b>	~1.15 kg/L (Part A+B mixed, +30 °C)	

### SYSTEM INFORMATION

<b>System structure</b>	Substrate primer	Sikadur <sup>®</sup> -300 IN / Sikadur <sup>®</sup> -330 IN
	Impregnating / laminating resin	Sikadur <sup>®</sup> -300 IN
	Structural strengthening fabric	SikaWrap <sup>®</sup> type to suit requirements

## TECHNICAL INFORMATION

<b>Modulus of Elasticity in Flexure</b>	~2800 N/mm <sup>2</sup> (7 days at +30 °C)	(ISO 178)
<b>Tensile strength</b>	~45 N/mm <sup>2</sup> (7 days at +30 °C)	(EN ISO 527-2)
<b>Modulus of elasticity in tension</b>	~2200 N/mm <sup>2</sup> (7 days at +30 °C)	(EN ISO 527-2)
<b>Elongation at break</b>	~1.5 % (7 days at +30 °C)	(EN ISO 527-2)
<b>Tensile adhesion strength</b>	~4 N/mm <sup>2</sup> (concrete failure, 7 days, +30 °C)	(EN 1542)
<b>Service temperature</b>	Maximum Minimum	+45 °C 0 °C
<b>Glass transition temperature</b>	+72 °C (7 days, +30 °C) Resistant to continuous exposure +45 °C.	(EN 12614)

## APPLICATION INFORMATION

<b>Mixing ratio</b>	Part A : Part B = 100 : 35 (by weight)
<b>Consumption</b>	Guide: 0.4–1.0 kg/m <sup>2</sup> Consumption will depend on the roughness of the substrate and the type of SikaWrap <sup>®</sup> fabric to be impregnated. See respective SikaWrap <sup>®</sup> fabric Product Data Sheet and also refer to: <ul style="list-style-type: none"><li>▪ Method Statement: SikaWrap<sup>®</sup> manual wet application - Ref 850 41 03</li><li>▪ Method Statement: SikaWrap<sup>®</sup> saturator machine wet application - Ref 850 41 04</li></ul>
<b>Ambient air temperature</b>	+15 °C min. / +40 °C max.
<b>Dew point</b>	Beware of condensation. The substrate and uncured applied resin must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the resin surface.
<b>Substrate temperature</b>	+15 °C min. / +40 °C max.
<b>Substrate moisture content</b>	≤ 4 % parts by weight The following test methods can be used: Sika <sup>®</sup> -Tramex meter, CM-measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).
<b>Pot life</b>	~50 minutes (100 g mass at +30 °C) (FIP 5.1) 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).
<b>Open time</b>	~70 minutes (100 g mass at +30 °C) (FIP 5.2)
<b>Waiting time / Overcoating</b>	15 hours minimum at +30 °C Cured resin older than 7 days has to be degreased with Sika <sup>®</sup> Colma Cleaner and gently grinded with sandpaper before coating. Times are approximate and will be affected by changing ambient conditions.
<b>Applied product ready for use</b>	7 days (full cure at +30 °C) Times are approximate and will be affected by changing ambient conditions.

## BASIS OF PRODUCT DATA

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.

## FURTHER DOCUMENTS

Reference must be made to the Sika® Method Statements:

- Method Statement: SikaWrap® manual wet application - Ref 850 41 03
- Method Statement: SikaWrap® saturator machine wet application - Ref 850 41 04

## IMPORTANT CONSIDERATIONS

- 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. A structural engineer must be consulted for load calculations for the specific application.
- Protect from rain for at least 24 hours after application. Ensure placement of fabric and laminating with roller takes place within open time.
- 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.

## 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 QUALITY

Substrates must be structurally sound and of sufficient tensile strength to provide a minimum pull off strength of 1.0 N/mm<sup>2</sup> or as required in the design specification.

Reference must be made to the Sika® Method Statements:

- Method Statement: SikaWrap® manual wet application - Ref 850 41 03
- Method Statement: SikaWrap® saturator machine wet application - Ref 850 41 04

## SUBSTRATE PREPARATION

Reference must be made to the Sika® Method Statements:

- Method Statement: SikaWrap® manual wet application - Ref 850 41 03
- Method Statement: SikaWrap® saturator machine wet application - Ref 850 41 04

## MIXING

### IMPORTANT

Mix full units only

### IMPORTANT

Over mixing must be avoided to minimise air entrainment.

1. Mix part A (resin) briefly using a mixing spindle attached to a slow speed electric mixer (max. 300 rpm).
2. Add part B (hardener) to part A and mix parts A+B continuously for at least 3 minutes until a uniformly coloured smooth consistency mix has been achieved.
3. To ensure thorough mixing pour materials into a clean container and mix again for approximately 1 minute. Mixing time for A+B = 4.0 minutes.

## APPLICATION

Reference must be made to the Sika® Method Statements:

- Method Statement: SikaWrap® manual wet application - Ref 850 41 03
- Method Statement: SikaWrap® saturator machine wet application - Ref 850 41 04

## CLEANING OF TOOLS

Clean all tools and application equipment immediately after use with Sika® Colma Cleaner. 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.

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