



SikaDur® 300

Epoxy Laminating/Saturant Resin for the SikaWrap® Structural Strengthening System

Technical Data Sheet

DESCRIPTION

SikaDur 300 is a solvent free, cold cure, two component epoxy resin based products formulated specifically for the bonding of the **SikaWrap** structural strengthening fabrics using the "wet" application system.

USES

- * Bonding of **SikaWrap** structural fabrics to concrete, timber and masonry substrates.
- * **SikaDur 300** is used as a primer and laminating/saturant resin.

A component of the **SikaWrap** structural strengthening system.

ADVANTAGES

- * Part of a complete and independently tested system.
- * Excellent adhesion to correctly prepared substrates, even when damp.
- * Good stress transfer between the structural member and structural fabric.
- * Comprehensively proven in field applications.
- * Full specification service available.
- * No VOC's (Volatile Organic Compounds).
- * Solvent free.
- * High creep resistance under permanent load.
- * High temperature resistance.
- * High strength and modulus.
- * High abrasion and shock resistance.

Technical Data (typical)

Colour:	Clear/amber		
Density:	Approx 1.1 kg/l		
Viscosity: (+23°C)	750 mPas		
Application Temperatures:			
Min	+15°C		
Max	+40°C		
Maximum Service Temperature:	+60°C		
Curing Shrinkage:	Negligible		
Heat Defelction Temperature:	Curing	HDT	
Temperature:	7 days, +15°C	+43°C	
	7 days, +23°C	+49°C	
	7 days, +40°C	+60°C	
Flexural Modulus:	3000 N/mm ²		
Tensile Modulus:	3500 N/mm ²		
Tensile Strength:	45.0 N/mm ²		
Adhesive Strength:	>4 N/mm ² - concrete failure dependent on concrete strength and surface preparation		
Elongation at Break:	1.5%		
Pot Life:	+15°C	+23°C	+40°C
	6 hrs	4 hrs	90 mins
Open Time:	-	-	60 mins

All above values are approximate

SURFACE PREPARATION

Concrete and masonry substrates must be sound, clean and free from laitance, ice and all surface contaminants. After preparation by abrasive blasting to expose coarse and fine aggregate and profile the substrate, surfaces should be vacuum cleaned. Concrete/masonry suitability should be checked using bond and substrate strength tests. Minimum age of concrete 21-28 days. (MC <4%).

Repairs to the concrete substrate must be undertaken with structural cementitious or epoxy repair materials. Selection of materials will be dependent upon size of repair or cavity. (See separate product data sheets).

Timber surfaces should be prepared by planing or sanding. Dust should be removed by vacuum cleaner.

Bond tests should be made to ensure substrate preparation is adequate.

MIXING

The whole of Part A (resin) should be mixed with the whole of Part B (hardener) using a low speed drill (400-600 rpm) and suitable spiral or paddle mixer for 5 minutes until uniformly blended.

APPLICATION

Substrate Priming:

Apply the mixed **SikaDur 300** to the substrate by brush, roller or airless spray. For rough surfaces use **SikaDur 330**.

Fabric Laminating/Saturant Resin:

Apply the mixed **SikaDur 300** to the structural fabric manually or by mechanical saturator. (Also refer to fabric application procedure).

Fabric Protection:

A pigmented coating should be applied to system if exposed to direct sunlight.

For application of complete structural strengthening fabric system refer to separate **SikaWrap** product data sheets.

IMPORTANT CONSIDERATIONS

- * A suitable qualified person must be involved in the design of the strengthening works.
- * The application is inherently structural and great care should be taken in choosing suitably experienced specialist contractors.
- * A full material specification should be obtained from **Sika Limited**.
- * Do not dilute with solvent.
- * Ambient temperature during application must be at least 3°C above dew point.
- * Protect from rain for at least 24 hours after application.
- * DO NOT PART MIX PACKS.

Note: DETAILED ADVICE ON THE ABOVE SHOULD ALWAYS BE OBTAINED FROM **SIKA LIMITED**.

CLEANING

Remove **SikaDur 300** from tools, equipment etc with **Sika® Thinner C** whilst the product is still soft. Hardened material can only be removed mechanically.

PACKAGING

Refer to latest price list.

CONSUMPTION

Primer:: 0.5-0.10 litres/m²

Fabric Laminating/
Saturating Resin: 0.6-1.0 litres/m²/layer



The above are guide figures. Allowances should be made for substrate irregularity, wastage and fabric type. Also refer to individual **SikaWrap** consumption rates on relevant product data sheet.

STORAGE AND SHELF LIFE

SikaDur 300 should be stored in dry warehouse conditions between +5°C and +30°C in original containers. Shelf life under these circumstances is a minimum of one year.

Handling Precautions

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

Important Note

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 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

Please consult our Technical Sales Department for further information

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