

PRODUCT DATA SHEET

Sikadur[®] Hex-300

HIGH-MODULUS, HIGH-STRENGTH, IMPREGNATING RESIN



DESCRIPTION

Sikadur[®] Hex-300 is a two-component 100% solids, moisture-tolerant, high strength, high modulus epoxy. Sikadur[®] Hex 300 is compliant with the 2012 and 2009 International Building Codes (IBC) and the 1997 Uniform Building Code (UBC) per ICC-ES Evaluation Report ESR-3288.

USES

- Sikadur[®] Hex-300 may only be used by experienced professionals.
- For use as an impregnating resin with the SikaWrap[®] Structural Strengthening System.
 - Sikadur[®] Hex-300 is used as a seal coat and impregnating resin for horizontal and vertical applications.

CHARACTERISTICS / ADVANTAGES

- Long pot life
- Long open time
- Easy to mix
- Tolerant of moisture before, during and after cure
- 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 abrasion and shock resistance
- Solvent-free, VOC compliant

APPROVALS / STANDARDS

2009 & 2012 International Building Codes (IBC)
1997 Uniform Building Code (UBC) per ICC-ES Evaluation Report ESR-3288.

PRODUCT INFORMATION

Packaging	Part A: 10.6 litres Part B: 4.5 litres
Colour	Clear, slightly amber
Shelf Life	Twenty-four (24) months from date of production if stored properly in original, unopened and undamaged sealed packaging
Storage Conditions	Store dry at +4°C – +35 °C. Condition material to +18°C – 24°C before using.
Viscosity	~500–750 cps.

TECHNICAL INFORMATION

Compressive Strength	4 °C	23 °C	32 °C	(ASTM D-695)
	3 days	-	57.2 MPa	
	7 days	7.1 MPa	82.7 MPa	82.7 MPa
	28 days	-	77.9 MPa	-

Material cured and tested at the temperatures indicated and 50 % R.H.

Modulus of Elasticity in Compression	2,621 MPa (7 days)	23 °C, 50 % R.H.
Flexural Strength	79.3 MPa 123 MPa	(ASTM D-790) 23 °C, 50 % R.H. 60 °C, 50 % R.H. Post cured min. 48 hrs
Modulus of Elasticity in Flexure	3,517 MPa 4,138 MPa	(ASTM D-790) 23 °C, 50 % R.H. 60 °C, 50 % R.H. Post cured min. 48 hrs
Tensile Strength	41.4 MPa 70.3 MPa	(ASTM D-638) 23 °C, 50 % R.H. 60 °C, 50 % R.H. Post cured min. 48 hrs
Modulus of Elasticity in Tension	1,931 MPa 2,345 MPa	23 °C, 50 % R.H. 60 °C, 50 % R.H. Post cured min. 48 hrs
Elongation at Break	3.2 % 4.8 %	(ASTM D-638) 23 °C, 50 % R.H. 60 °C, 50 % R.H. Post cured min. 48 hrs
Heat Deflection Temperature	44.5 °C (7 days) (fiber stress loading = 1.8 MPa)	(ASTM D-648)
Water Absorption	0.32 % (7 days (24 hour immersion))	(ASTM D-570)
Service Temperature	-40°C to +60°C	

APPLICATION INFORMATION

Mixing Ratio	Mix entire unit, do not batch down
Consumption	As a sealer: 2.4 m ² /litre As an impregnating resin: 1.5 m ² /litre
Pot Life	~ 3–4 hours (~1 litre volume mixed)
Open Time	~ 6–7 hours (Time to reach ~10,000 cps)
Curing Time	~ 12–14 hours (Tack Free)

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The concrete surface should be prepared to a minimum concrete surface profile (CSP) 3 as defined by the ICRI-surface-profile chips. Localized out-of-plane variations, including form lines, should not exceed 1 mm. Substrate must be clean, sound, and free of surface moisture. Remove dust, laitance, grease, oils, curing compounds, waxes, impregnations, foreign particles, coatings and disintegrated materials by mechanical means (i.e. sandblasting). For best results, substrate should be dry. However, a saturated surface dry condition is acceptable.

MIXING

Pre-mix each component. Mix entire unit, do not batch. Pour contents of part 'B' to part 'A'. Mix thor-

oughly for 5 minutes using a paddle style mixer on low speed (400–600 rpm) drill until uniformly blended.

APPLICATION METHOD / TOOLS

As a sealer: Apply mixed Sikadur® Hex-300 epoxy to a properly prepared substrate using a brush, roller or airless sprayer. Sikadur® Hex-300 should be applied at a sufficient rate to fully saturate the substrate without producing a surface film. Coverage rates are based on a substrate with normal porosity.

As an impregnating resin: For vertical and horizontal applications, use Sikadur® Hex-300. For overhead applications use Sikadur® Hex-300 and Extender T. Resins may be applied to fabric by either manual or mechanical means. For further information, consult installation guidelines.

LIMITATIONS

- Minimum substrate and ambient temperature 4 °C
- Do not thin with solvents
- Material is a vapor barrier after cure
- Minimum age of concrete must be 21–28 days depending on curing and drying conditions
- Not an aesthetic product. Color may alter due to variations in lighting and/or UV exposure
- Mechanically prepared, top side, horizontal concrete surfaces can be primed with Sikadur® Hex-300. Vertical or overhead surfaces however, must be primed with Sikadur® Hex-300 and Extender T.

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.

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

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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