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# PRODUCT DATA SHEET Sikalastic<sup>®</sup>-100 VB

## TWO-COMPONENT, 100% SOLIDS, VAPOR-BLOCKING EPOXY PRIMER

### **PRODUCT DESCRIPTION**

Sikalastic<sup>®</sup>-100 VB is a two-component, solvent-free, low viscosity, 100% solids, vapor-blocking epoxy primer for use under Sika's Waterproofing & Traffic Systems that require protection from high moisture content concrete.

#### USES

- Moisture barrier to help control moisture propagation in concrete substrates with up to 100 % R.H. or 25 lb/1,000 ft<sup>2</sup>/24 h (11.4kg/92.9m<sup>2</sup>/24 h)
- For use under Sika's Waterproofing & Traffic Systems as a moisture barrier primer on concrete surfaces including on-grade concrete, non-vented concrete/steel pan composite decks and split-slab applications with encapsulated waterproofing.
- Can be used as a moisture tolerant primer on applications over elevated concrete slabs.

## **CHARACTERISTICS / ADVANTAGES**

- Vapor-blocking primer for high moisture concrete
- Low Viscosity, high surface penetration
- Fills concrete capillaries well below surface
- Lightly pigmented to show coverage
- 100% Solids, Solvent-free epoxy
- Low VOC

Service Temperature	-40°F–158°F (-40°C–70°C)	
Shore D Hardness	83	(ASTM D-2240) at 7 days 73 °F (23 °C) 50 % R.H
Volatile organic compound (VOC) con- tent	See Product Safety Data Sheet	
Viscosity	250 cps	
Color	Blue	
Storage Conditions	Store dry at 50–77 °F (10–25 °C)	
Shelf Life	12 months in original, unopened containers	
Packaging	4 gal. kit (3 gal. A, 1 gal. B)	

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## **PRODUCT INFORMATION**

#### **APPLICATION INFORMATION**

Coverage	160 ft <sup>2</sup> /gal per coat* *Two coats required. Coverage is theoretical, proper application includes a visual inspection.	
Ambient Air Temperature	min. 41 °F / max. 95 °F	
Substrate Temperature	min. 41 °F / max. 95 °F	
Pot Life	Temperature	Working Time
	50 °F (10 °C)	approx. 60 minutes
	68 °F (20 °C)	approx. 30 minutes
	86 °F (30 °C)	approx. 15 minutes
Cure Time	Temperature	Cure Time
	50 °F (10 °C)	18 hours
	73 °F (23 °C)	8 hours
	86 °F (30 °C)	6 hours
Waiting / Recoat Times	Up to 36 hours	
	If Sikalastic®-100 VB is not overcoated within 36 hours, the coating must be abraded and solvent wiped	

followed by an additional coat of Sikalastic®-100 VB before proceeding.

#### **BASIS OF PRODUCT DATA**

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

## LIMITATIONS

- To avoid dew point conditions and prolonged cure during application, relative humidity must be no more than 85 % and substrate temperature must be at least 5 °F (3 °C) above measured dew point temperatures.
- Minimum ambient and substrate temperature during application and curing of material is 41 °F (5 °C); maximum is 95 °F (35 °C). Frequent monitoring of ambient and substrate temperature should always be done when applying epoxy primers. Note that low temperatures will slow down the cure, and high temperatures will accelerate it.
- Will not prevent hydrostatic pressure
- Do not thin with solvents
- Do not store materials outdoors exposed to sunlight and moisture for prolonged periods
- Primer is not UV stable and must be topcoated.
- Do not spray apply Sikalastic<sup>®</sup>-100 VB
- On substrates likely to exhibit outgassing apply during falling ambient and substrate temperature. If applied during rising temperature pinholing may occur.
- MUST produce a monolithic, pinhole-free finish with a continuous film with no surface imperfections showing through.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various product

solutions). Surface irregularities may reflect through the cured system and/or prevent the ability to achieve a mirror-like finish.

## ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

## **APPLICATION INSTRUCTIONS**

#### SUBSTRATE PREPARATION

Surface must be clean, sound, and dry. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes, and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application. **Concrete** - Should be cleaned and prepared to achieve a laitance and contaminant-free, open textured surface by blast cleaning or equivalent mechanical means (CSP-3-4 per ICRI guidelines). Vacuum any remaining dirt and dust. Removing residual dust will help ensure a tenacious bond between the primer and substrate. **Moisture Testing-** Moisture testing is required prior to all applications of Sikalastic®-100 VB. The following moisture testing is required;

 <u>Tramex Concrete Moisture Encounter Meter [ASTM</u> <u>F2659]</u> - Require 6% or less moisture content, showing



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the top-level slab moisture will not prevent a tenacious bond between Sikalastic<sup>®</sup>-100 VB and concrete.

- <u>Plastic Sheet Method [ASTM D4263]</u> To determine if vapor drive on concrete slab is a factor. If moisture develops on the underside of the plastic sheet then Sikalastic<sup>®</sup>-100 VB should not be applied until a successful plastic sheet test can be done.
- <u>R.H Testing [ASTM F2170]</u> To determine actual concrete moisture and document prior to starting application.

#### MIXING

Add one full can of component B to one full can of component A, then mix with an electric drill and Jiffy style paddle at a low speed to reduce air entrainment (300–400 rpm). Scrape the sides of the container, Mix the combined material thoroughly for 3 minutes until a homogenous mixture and uniform color is obtained. Use care to prevent whipping air into the material while mixing - use a slow and methodical mixing approach. Do not turn over pails to get all resin on sidewalls out of pail, this will result in uncured rings.

#### APPLICATION

#### **Appliations as Moisture Tolerant Primer**

Measure moisture content of concrete substrate by weight with a Tramex CME concrete moisture meter; when less than 5 % apply one coat of Sikalastic<sup>®</sup>-100 VB; when greater than 5% and less than 6% apply two coats of Sikalastic<sup>®</sup>-100 VB. Apply primer by 1/8" squeegee at the rate of 160-200 ft<sup>2</sup> / US gal at 8-10 mils wet film thickness and back roll with a phenolic resin core roller with pressure. Coverage will vary depending on the porosity of the prepared substrate. If moisture content recquires, apply a second primer coat by squeegee at the rate of 160-200 ft<sup>2</sup> / US gal at 8-10 mils wet film thickness and back roll with pressure after the first primer coat is tack free, which is typically after 8 hours at 68 °F (20 °C). Do not apply by dipping roller into mixing container. Pour a bead of product in the form of a ribbon on the substrate to be coated and then spread with squeegee and back roll. Ensure that the second coating is pore-free and pinhole-free and provides uniform and complete coverage over the entire concrete substrate.

#### **Applications as Moisture Barrier Primer**

Sikalastic<sup>®</sup>-100 VB requires two coats for all applications. Apply Sikalastic<sup>®</sup>-100 VB uniformly to the substrate using a squeegee or medium nap roller, then backroll in two directions: one perpendicular to the other. Pour entire contents of pail onto the floor for best working time. Apply first coat at 160 sf/gal at 10 mils over the entire application area. Apply the second coat and ensure that a continuous coat is achieved over the entire surface MUST produce a mirror-like finish. A mirror-like finish is defined by no substrate imperfections showing through Sikalastic<sup>®</sup>-100 VB, monolithic and pinhole-free, feeling glass smooth to the touch. If a a mirror-like finish is not achieved, an additional coat of Sikalastic<sup>®</sup>-100 VB must be applied to achieve proper performance. Sikalastic®-100 VB can be overcoated once tack free, typically 8 hours at 73°F 50% R.H. Sikalastic®-100 VB must be overcoated within 36 hours after application. If Sikalastic®-100 VB is left exposed longer than 36 hours the surface must be mechanically prepared (i.e. sanding, grinding) and solvent wiped before an additional coat of Sikalastic®-100 VB before proceeding.

#### **CLEANING OF TOOLS**

Remove wet primer with locally-approved solvent and/or dry cloth. Once cured, primer can only be removed by mechanical means. Strictly follow solvent manufacturer's warnings and instructions for use.

### **OTHER RESTRICTIONS**

See Legal Disclaimer.

### LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product

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Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

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