

PRODUCT DATA SHEET

Sikafloor®-155 WN

TWO PART WATER DISPERSED EPOXY RESIN PRIMER

PRODUCT DESCRIPTION

Sikafloor®-155 WN is a solvent-free, water dispersed primer based on epoxy resin.

USES

Sikafloor®-155 WN may only be used by experienced professionals.

As a primer and adhesion promoter on properly prepared:

- New concrete
- Cementitious screeds
- Hardened concrete
- Existing epoxy floor coatings
- EpoCem levelling layers

As a primer for:

- Sikafloor®-81 EpoCem®
- Sikafloor®-20 PurCem® and Sikafloor®-21 PurCem® if required.

CHARACTERISTICS / ADVANTAGES

- Easy and fast to apply
- Especially suitable for highly absorbent substrates
- Water dispersed and odourless
- Can be applied in unventilated areas
- Very good bond strength over its whole application temperature range
- Environmentally friendly

APPROVALS / STANDARDS

Two part water dispersed epoxy resin primer according to EN 13813:2002, DoP 02 08 11 01 001 0 000002 1053.

PRODUCT INFORMATION

Chemical Base	Water dispersed epoxy	
Packaging	Part A	7.5 kg containers
	Part B	2.5 kg containers
	Part A+B	10 kg ready to mix units
Appearance / Colour	Resin - part A	thick coloured paste
	Hardener - part B	light yellow translucent emulsion
	Mixed Resin	Oxide red (~ RAL 3009)
Shelf Life	12 months from date of production	
Storage Conditions	The product must be stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5°C and +30°C.	

Density	Part A	~ 1.6 kg /l	(DIN EN ISO 2811-1)
	Part B	~ 1.1 kg /l	
	Mixed resin	~ 1.4 kg /l	

All density values at 23°C.

Solid content by weight ~ 70 %

Solid content by volume ~ 56 %

Viscosity 4900 mPa.s (+20°C) Contraves (RM 180 Rheomat)

TECHNICAL INFORMATION

Tensile Adhesion Strength >1.5 N/mm² (failure in concrete), 28 days at +23°C / 50% r.h. (EN 13892-8)

SYSTEM INFORMATION

Systems 1 - 2 coats (dependent on substrate porosity)

APPLICATION INFORMATION

Mixing Ratio Part A : B = 3 : 1 by weight

Consumption 0.3 - 0.5 kg/m² / coat. (2 - 3.3 m² / kg / coat).
 Sikafloor®-155 WN, diluted with water 10% by weight for the first coat.
 Undiluted for the second coat.
 This figure is theoretical and does not include for any additional material required due to surface porosity, surface profile, variation in level or wastage, etc.

Layer Thickness D.F.T.: ~ 110 - 180 µm per coat

Ambient Air Temperature +10°C min. / +35°C max.

Relative Air Humidity 85% r.h. max.

Dew Point Beware of condensation!
 The substrate and uncured floor must be at least 3°C above dew point to reduce the risk of condensation or blooming on the surface of the applied product.

Substrate Temperature +10°C min. / +35°C max.

Substrate Moisture Content Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. Always confirm substrate moisture content prior to the application of the primer:

- < 4% for impervious resin finishes. No rising moisture according to ASTM D 4263 test (Polyethylene sheet).
- Can be applied on matt - damp green concrete when overcoating with the Sikafloor® EpoCem® range.

Pot Life	Temperature	Time
	+10°C	~ 180 minutes
+20°C	~ 90 minutes	
+30°C	~ 45 minutes	

Caution: expiry of potlife without visible change. (Above values at 75% r.h.)

Curing Time	Before applying Sikafloor®-81 onto Sikafloor®-155 WN allow:		
	Substrate temperature	Min.waiting time	Max.waiting time
+10°C	12 hours	72 hours	
+20°C	6 hours	48 hours	
+30°C	4 hours	24 hours	

At low temperatures and / or high humidity curing time will increase.
 Apply subsequent coats only to tack free primer.

Substrate temperature	Foot traffic
+10°C	~ 12 hours
+20°C	~ 12 hours
+30°C	~ 12 hours

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm².
- The substrate can be damp but must be free of standing water and free of all contaminants such as oil, grease, coatings and surface treatments etc. If in doubt, apply a test area first.
- Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.
- Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed.
- Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, SikaDur® and Sikagard® range of materials.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush or vacuum.

MIXING

Prior to mixing, thoroughly stir part A (resin) well, then add all of part B (hardener) and mix both liquid parts thoroughly for one minute until a uniform mix has been achieved.

When parts A and B have been mixed for one minute for the first coat, slowly add 10% of clean water while mixing continues for a further two minutes, until a fully homogenous mix has been achieved.

For the second coat, do not add additional water, but continue the mixing for a total of 3 minutes until a fully homogenous mix has been achieved.

To ensure thorough mixing of both coats, after the minimum 3 minutes mixing, pour the mixed material into another container carefully scraping the sides and mixing paddle with a spatula and then mix again briefly to ensure complete and thorough mixing. Excessive mixing must also be avoided to minimise air entrainment.

Mixing Tools

Low speed electric stirrer (~ 300 - 400 rpm)

APPLICATION

Apply Sikafloor®-155 WN by suitable brush, roller or trowel and overwork with a roller.

Caution:

The end of the product's potlife is not noticeable! Keep within the limitations mentioned below. Discard material not used within these times.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically.

FURTHER DOCUMENTS

- **Substrate quality & Preparation**
Please refer to Sika Information Manual: "EVALUATION AND PREPARATION OF SURFACES FOR FLOORING SYSTEMS".
- **Application instructions**
Please refer to Sika Information Manual: "MIXING & APPLICATION OF FLOORING SYSTEMS".
- **Maintenance**
Please refer to "Sikafloor®- CLEANING REGIME".

LIMITATIONS

- At low temperatures and/or high humidity, the curing time will increase.
- Protect application from rain / water while reaction and curing takes place.
- Dilution of the first coat with 10% of water by weight helps improve bond on dense and only slightly absorbent substrates, as well as reducing the consumption of material on excessively porous substrates. When applying a second coat, always use it undiluted.
- Make sure to monitor and control the pot life of the mix as the end of pot life is not visibly noticeable. Discard any material at the pot life limits indicated for the existing application conditions!

VALUE BASE

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

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

According to the EU Directive 2004/42/CE, the maximum allowed content of VOC (product category IIA / x type xx) is 140 g/l (Limits 2010) for the ready to use product.

The maximum content of Sikafloor®-155 WN is ≤ 140

g/l VOC for the ready to use product.

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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Product Data Sheet

Sikafloor®-155 WN
March 2020, Version 03.02
020811010010000002

Sikafloor-155WN-en-GB-(03-2020)-3-2.pdf

