

PRODUCT DATA SHEET

Sikagard® PU UR

UV RESISTANT PROTECTIVE COATING BASED ON POLYURETHANE RESIN FOR CONCRETE AND STEEL

DESCRIPTION

Sikagard® PU UR is a two component, UV resistant, polyurethane resin based protective coating and sealer coat for concrete and steel structures. It is colour stable and available in gloss finish in various RAL shades.

USES

Sikagard® PU UR is recommended as protective coating against aggressive atmosphere on the following substrates:

- Concrete
- Rendering
- Stone
- Asbestos cement
- Steel
- Iron

Sikagard® PU UR is recommended for usage as protective coating to following kind of structures, wherever UV resistant coating is desired:

- Cooling tower
- Bridge and Flyover in marine location
- Chimney
- Waste water treatment plant
- Chemical manufacturing plant
- Metal structures in marine area

CHARACTERISTICS / ADVANTAGES

Sikagard® PU UR provides following advantages:

- Corrosion resistant
- Resistant to saline environments
- Good chemical resistance
- Weather proof
- UV resistant
- Colour stable and non-yellowing
- Easy to apply
- Glossy finish
- Low dirt pick up

PRODUCT INFORMATION

Chemical Base	Polyurethane resin	
Packaging	Part A+B pre-batched units	4 kg x 2 sets
	Part A	3.50 kg plastic container
	Part B	0.50 kg plastic container

Appearance / Colour	Part A+B mixed	glossy coloured liquid
	Part A	coloured liquid
	Part B	transparent viscous liquid
Available in various ~RAL shades.		
Shelf Life	12 months from the date of production	
Storage Conditions	Store properly in undamaged and unopened original sealed packaging in cool and dry conditions. Protect from direct sunlight and frost.	
Density	1.20 ± 0.05 kg/L at +30 °C (Part A+B mixed)	
Solid content by weight	~68%	

TECHNICAL INFORMATION

Tensile Adhesion Strength	≥ 1.5 N/mm ² on concrete substrate	(ISO 4624)
Resistance to UV Exposure	Excellent, no discolouration	
Behaviour after Artificial Weathering	No sign of chalking, checking, spotting, flaking, blooming or corrosion when tested for 1440 hours	(DIN EN ISO 11507)

SYSTEM INFORMATION

System Structure	Concrete surfaces	
	Layer	Product
	Moisture barrier	Sikagard®-720 Epocem IN
	Primer coat	Sikadur® PF IN or Sikagard®-67 or Sikafloor®-161 HC
	Finishing coat	Sikagard® PU UR
	Metal surfaces	
	Layer	Product
	Primer coat	Friazinc R or Sikafloor®-161 HC
	Finishing coat	Sikagard® PU UR

APPLICATION INFORMATION

Mixing Ratio	Part A : Part B = 7 : 1 (by weight)	
Consumption	~0.15 kg per m ² per coat depending on porosity of substrate	
Layer Thickness	~150 microns in 2 coats	
Ambient Air Temperature	+10 °C min. / +40 °C max.	
Relative Air Humidity	70% max.	
Dew Point	Beware of condensation! The substrate must be at least 3 °C above the Dew Point	
Substrate Temperature	+10 °C min. / +40 °C max.	
Substrate Moisture Content	≤ 4% as measured with Tramex® CME/CMExpert type concrete moisture meter	
Pot Life	~30 minutes at +30 °C	
Waiting Time / Overcoating	6 hours at +30 °C & relative humidity 75%	
Drying Time	Touch dry	~24 hours
	Full cure	~7 days

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete substrates

The substrate must be dry and clean from presence of any dust or laitance. For proper bond roughen the surface by sand paper or by wire brush. Clean the surface properly before applying the coating. Water cleaning is not permissible. Use concrete pore filling system such as Sikadur® PF IN before application of Sikagard® PU UR. For old concrete substrates, use primer coat as recommended. For damp substrates or wherever moisture ingress is expected, use Sikagard®-720 Epoem IN as moisture barrier.

Metal substrates

The substrate must be dry and clean from presence of any rust or existing coatings. For proper bond roughen the surface by sand paper or by wire brush. Clean the surface properly before applying the coating. For existing metal substrates, use primer coat as recommended. For corroded metal substrates, use Sika® Rustoff-100 for cleaning the rust, followed by Friezinc R as corrosion protection.

MIXING

Sikagard® PU UR is supplied in two parts. Mix parts A & B for 3 minutes by the low speed (250–300 rpm) mechanical stirrer. Mix in such a way that the material becomes homogeneous without generating air bubbles.

APPLICATION

After mixing apply by roller or brush on the prepared surface in 1 or 2 coats as per system. Before application clean the roller brush from loose fibers by rolling on an adhesive tape.

CLEANING OF TOOLS

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

LIMITATIONS

- It is recommended to use Sikagard® PU UR over temporary moisture barrier layer on concrete substrates where high moisture is expected.
- For good quality finish, usage of pore filler epoxy putty Sikadur® PF IN may be necessary for concrete substrates.

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- Sikagard® PU UR coating is suitable for saline and mild chemical exposures. DO NOT use Sikagard® PU UR for application areas where highly acidic environment is expected. This could lead to discolouration and affect the durability of the Sikagard® PU UR. For high chemical resistance use Sikagard®-63.
- Primer coat may not be necessary for new and dry concrete substrate or new metal substrates. Consult Sika® Technical Service team for more details.
- Sikagard® PU UR may not be used where high abrasion is expected.

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 declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

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.