BUILDING TRUST

PRODUCT DATA SHEET

Sikagard®-406 W

SINGLE COMPONENT, WATERBORNE ACRYLIC RESIN WALL COATING

PRODUCT DESCRIPTION

Sikagard®-406 W is a single component white, water-borne acrylic resin based surface coating containing an organic in film preservative with a mat finish.

USES

Sikagard®-406 W may only be used by experienced professionals.

- Top coat or standalone coating for internal walls and ceilings
- For concrete, bricks, cement based and gypsum substrates, metallic surfaces, timber, tiles and plastic
- Suitable for pharmaceutical, medical engineering, food and beverage industry, hospitals, healthcare facilities, kitchens and prisons and leisure facilities

CHARACTERISTICS / ADVANTAGES

- Easy to apply
- Good resistance to repeated cleaning regimes using mild detergents and cleaning solutions
- Tough and highly durable
- Good covering and hiding power (opacity)
- Permeable to water vapour
- Ultra-low emission
- More flexible in comparison to standard paints, improved resistance to cracking and flaking
- Mat finish
- Seamless, easy to clean finish
- Low odour

ENVIRONMENTAL INFORMATION

LEED Rating
Sikagard®-406 W conforms to the requirements of LEED EQ Credit 4.2: Low –Emitting Materials: Paints & Coatings SCAQMD Method 304-91 VOC Content < 100 g/l

APPROVALS / STANDARDS

- Exova Warrington fire, test report No. 363981 & 363982, behaviour to fire according to BS 476, April 27, 2016
- Eurofins, test report No. 392-2015-00386902, determination of VOC and SVOC content according to ISO 11890-2/ ASTM D6886, December 10, 2015
- PRA, test report No. 77564-049, gloss, fineness, grind wet scrub resistance and contrast ratio according to EN 13300, November 21, 2015.
- IMSL, test report 2015/02/004.1A, determination of antibacterial activity according to ISO 22196, May 12, 2015
- Campden BRI Group, test report No. S/REP/138532/2, Sensory Evaluation of the Taint Potential, Triangle Test Method TES-S-002 according to EN ISO 4120:2007, Odour Transfer Method, February 8, 2016
- TÜV Rheinland, test report 21246824001, determination of VOC emission according to French Regulations Decret DEVL 1101903D and Decret DEVL 11034675A, November 18, 2015
- 4wardtesting, test report No. C 2906, water vapour permeability according to ISO 7783-1:2000, January 5, 2016

PRODUCT INFORMATION

Chemical Base	Waterborne acrylic copolymer dispersion
Packaging	5.0 l (= 6.60kg) drums 15.0 l (= 19.80 kg) containers
Appearance / Colour	Available colours BS08B15, BS12B21, BS14C31, BS18E49, BS18E50, RAL1013, RAL3015, RAL7035, RAL9001, White
Shelf Life	12 month from date of production
Storage Conditions	From date of production if stored properly in closed, sealed undamaged packaging in dry conditions at temperatures between +5°C and +30°C. Protect from direct sunlight and frost.
Density	~1.24 kg/l (DIN EN ISO 2811-1)
Solid content by weight	~52 %
Solid content by volume	~40 %

TECHNICAL INFORMATION

Tensile Strength	~10 N/mm² unreinforced		(EN ISO 527-3)
Elongation at Break	~70 % unreinforced		(EN ISO 527-3)
Tensile adhesion strength	≥ 1.5N/mm²	to concrete using Sika Bonding Primer	(ISO 4624)

Chemical Resistance

Good short-term resistance to weak acids, alkalis and cleaning products. Please contact Sika technical service for specific information.
Disinfection with Hydrogen Peroxide Vapour:

- Resistant when using Steris VHP technology
- Resistant to PEA vaporisation technology, when a system build up with glass fibre reinforcement is used
- Resistant when using Oxypharm vaporiser type Nocospray under following conditions:

Disinfectant	Concentration	Setting at vaporiser	Contact time
NOCOLYSE Mint (6 %)	1 ml/m³	20 m³ (1.5 minutes vaporisation)	30 min
NOCOLYSE One Shot (12 %)	3 ml/m³ (2 cycles)	45m³ (5 minutes vaporisation)	30 min
NOCOLYSE Food (7.9 %)	1 ml/m³	20 m³ (1.5 minutes vaporisation)	30 min
NOCOLYSE Food (7.9 %)	5 ml/m³ (2 cycles)	75m³ (5 minutes vaporisation)	60 min

APPLICATION INFORMATION

Consumption	~0.23kg/m² per layer ~0.18 l/m² per layer
Ambient Air Temperature	+8°C min. / +35°C max.
Relative Air Humidity	≤ 80%
Dew Point	Beware of condensation! The substrate must be at least 3 °C above dew point to reduce the risk of

	condensation or blooming on the wall finish.
Substrate Temperature	+8 °C min. / +35 °C max.
Substrate Moisture Content	Visible damp free, < 6 % pbw moisture content test method: Sika®-Tramex meter
Curing Time	Before applying Sikagard®-406 W to Sikagard®-406 W allow:

Substrate temperature	Minimum	Maximum
+10 °C	4 hours	7 days
+20 °C	2 hours	7 days
+30 °C	1 hour	7 days

Before applying Sikagard®-406 W to Sikagard®-403 W allow:

Substrate temperature	Minimum	Maximum
+10 °C	4 hours	7 days
+20 °C	1 hour	7 days
+30 °C	1 hour	7 days

Applied Product Ready for Use	Temperature	Tack free	Full cure
	+10 °C/ 50 % r.h.	~ 8 hours	~ 7days
	+20 °C/ 50 % r.h.	~ 4 hours	~ 7days
	+30 °C/ 50 % r.h.	~ 3 hours	~ 7days

APPLICATION INSTRUCTIONS

APPLICATION

Stir product until a uniform liquid is achieved. Use low speed stirrer (300-400 rpm) to avoid air entrapment.
For Roller application use short piled roller.
For airless application use tip size from 0.38 to 0.53mm and angle from 40° to 60°.

CLEANING OF TOOLS

Clean all tools and application tolls with water immediately after use. Hardened and/ or cured material can only be removed mechanically or with proprietary paint stripper.

LIMITATIONS

- Each method of application will leave a different surface finish. If surface finish is important do not mix methods within single areas.
- Each type of roller will give a slightly different surface finish - always use same roller type in same areas.
- Ensure entire surface is fully dried before proceeding. Crazing may occur over coating un-dried surfaces or when applying excessively thick material.
- Do not apply over silicone sealants.
- Always ensure good ventilation when application takes place in a confined space to ensure drying and full curing.
- The gloss of the applied material is influenced by humidity, temperature and absorbency of the substrate.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.
- For spray application the use of protective health & safety equipment is mandatory!
- If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO_2 and H_2O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.
- New concrete should be allowed to cure/hydrate for a minimum of 10 days and preferably 28 days.
- Do not apply near foodstuffs in unventilated conditions, always ensure adequate ventilation.
- Do no thin or brush out like conventional paints.
- Acoustic insulation boards may lose some acoustic absorption after coating.

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

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.

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

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / j type wb) is 140 g/l (Limits 2010) for the ready to use

product.
The maximum content of Sikagard®-406 W W 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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