

PRODUCT DATA SHEET

Sikagard®-675 W GB ElastoColor

PROTECTIVE COATING FOR CONCRETE



PRODUCT DESCRIPTION

Sikagard®-675 W GB ElastoColor is a one-part, plasto-elastic water dispersed coating based on styrene acrylate dispersion for the protection and enhancement of fair-faced concrete. Sikagard®-675 W GB ElastoColor can be applied over existing coatings or directly onto the concrete surfaces. Sikagard®-675 W GB ElastoColor complies with the requirements of EN 1504-2 as a protective coating.

USES

- Protection and enhancement of concrete structures.
- Concrete repair works on Sika® levelling mortar, fibre cement and overcoating existing soundly adhering coatings.
- Suitable for protection against ingress (Principle 1, method 1.3 of EN 1504-9),
- Suitable for moisture control (Principle 2, method 2.3 of EN 1504-9)
- Suitable for increasing the resistivity (Principle 8, method 8.3 of EN 1504-9)

CHARACTERISTICS / ADVANTAGES

- Water vapour permeable
- Resistant to weathering and ageing
- Application by roller brush or spray
- High covering power (good opacity)
- Prevents water ingress
- High diffusion resistance to CO₂ (carbon dioxide)

APPROVALS / STANDARDS

Conforms to the requirements of EN 1504-2.

Complies with the requirements for Class 'O', surface as defined in paragraph A13(b) of Approved Document B (Volumes 1 and 2) (2006 Edition) 'Fire Safety' to the Building Regulations 2000.

BS476 Part 6 : Class 1

BS476 Part 7 : Class 1

PRODUCT INFORMATION

Chemical Base	Styrene acrylate dispersion
Packaging	15 l pails
Appearance / Colour	Thixotropic liquid available in almost every colour shade.
Shelf Life	12 months
Storage Conditions	Store in cool and dry conditions. Protect from direct sunlight and frost.
Density	~1.42 kg/l (at +20 °C)
Solid content by weight	~64 %
Solid content by volume	~48 %

TECHNICAL INFORMATION

Tensile Adhesion Strength	~ 2.7 MPa	(EN 1542)
Reaction to Fire	Class E	
Behaviour after Artificial Weathering	Pass after 2000 hours	
Diffusion Resistance to Water Vapour	Dry film thickness	d = 270 µm (EN ISO 7783-1 & -2)
	Equivalent air layer thickness	S _D , H ₂ O = 0.59 m
	Water Vapour Permeability	35.6 g/m ² /day
	Requirements for breathability	S _D , H ₂ O ≤ 5 m
Capillary Absorption	w = 0.07 kg/(m ² h ^{0.5})	(EN 1062-3)
Permeability to CO₂	Dry film thickness	d = 160 µm (EN 1062-6)
	Equivalent air thickness	S _D , CO ₂ = 235 m
	Diffusion coefficient CO ₂	µCO ₂ = 1.47x 10 ⁶
	Requirements for protection	S _D , CO ₂ ≥ 50 m

SYSTEM INFORMATION

System Structure		
Normal absorbent concrete and/or well cured thin layer Sika renders (Sika MonoTop®-620 etc.):		
System	Product	Number of coats
Priming	Sikagard®-675 W GB ElastoColor diluted with ~15% H ₂ O	1
Smooth non-absorbent concrete:		
System	Product	Number of coats
Priming	Sikagard®-551 S Elastic Primer	1
Absorbent fair faced concrete:		
System	Product	Number of coats
Priming	Sikagard®-552 W AquaPrimer	1
Water splash zones, de-icing salt exposure:		
System	Product	Number of coats
Priming	Sikagard®-705 L or other Sika® hydrophobic impregnation (Penetration depth class II - EN 1504-2)	1-2
Varied types of substrates- Dense or weak tensile strength < 1 MPa		
System	Product	Number of coats
Priming	Sikagard®-551 S Elastic Primer	1
All substrates:		
System	Product	Number of coats
Top coat*	Sikagard®-675 W GB ElastoColor	2

Note:

- With yellow or red colour shade variations and/or dark substrates, more than two coats may be required. Trials are advised.

APPLICATION INFORMATION

Consumption	Product	Per coat
	Sikagard®-551 S Elastic Primer	~ 0.10 - 0.15 kg/m ²
	Sikagard®-552 W Aquaprimer	~ 0.10 - 0.15 kg/m ²
	Sikagard®-705 L	~ 0.15 kg/m ²
	Sikagard®-675 W ElastoColor	~ 0.20 - 0.25 kg/m ²
Layer Thickness	Minimum required dry thickness to achieve full durability characteristics (CO ₂ diffusion, adhesion after thermal cycling, etc.) ~ 160 microns.	
Ambient Air Temperature	+8 °C min. / +35 °C max.	
Relative Air Humidity	<80 %	
Dew Point	Substrate and ambient temperature must be at least 3 °C above dew point.	
Substrate Temperature	+8 °C min. / +35 °C max.	
Waiting Time / Overcoating	Waiting time between coats at +20 °C substrate temperature:	
	Previous coating	Waiting time (Hours)
	Sikagard®-552 W Aquaprimer	≥12
	Sikagard®-551 S Elastic Primer	≥18
	Sikagard®-705 L	≥5
	Sikagard®-675 W GB ElastoColor	≥1
	Next coating	Sikagard®-675 W GB ElastoColor
Note: A refresher coat of Sikagard®-675 W GB ElastoColor can be applied without priming if the existing coat has been thoroughly cleaned		
Curing Treatment	Sikagard®-675 W GB ElastoColor does not require any special curing but must be protected from rain for at least 2 hours at +20 °C.	
Applied Product Ready for Use	Final drying: ~24 hours at +20 °C	

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Exposed concrete without existing coating:

- The surface must be dry, sound and free from loose and friable particles.
- Suitable preparation methods are steam cleaning, high pressure water jetting or blast cleaning.
- New concrete must be at least 28 days old.
- If required, a levelling render / pore sealer (e.g. Sika® Mono-Top®-620, Sikagard®-720 EpoCem®, Sikagard®-545 WElastofill, etc.) shall be applied.
- For cement based products, allow a curing time of at least 4 days before coating (When Sikagard®-720 EpoCem® is used, coating can be applied within 24 hours).

Exposed concrete with existing coating:

- Existing coatings must be tested to confirm their adhesion to the substrate and their compatibility - adhesion test average > 0.8 N/mm² with no single value below 0.5 MPa.
- For water based coating, use a primer of Sikagard-552 W AquaPrimer.
- For solvent based coating, use a primer Sikagard-551

S Elastic Primer.

- If coating type is unknown, carry out compatibility and adhesion testing to determine which primer is most suitable – wait at least 2 weeks prior to conduct the adhesion test - an average value of 0.8 MPa is required with no single value below 0.5 MPa.

APPLICATION

- Sikagard®-675 W GB ElastoColor is supplied ready for use.
- If required apply appropriate primer to substrate (refer to coating system structure).
- Sikagard®-675 W GB ElastoColor can be applied by brush, roller or airless spray.
- For airless spray application: Pressure: ~150 bar. Nozzle bore: 0.38–0.53 mm. Spray angle: ~50–80°

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically. For Sikagard®-551 S Elastic Primer use Sika® Thinner C.

LIMITATIONS

- Product must be not thinned unless the 1st coat is used as a primer (refer to coating system structure).
- Application during cold temperatures below recommended application temperatures may reduce adhesion values.
- Product is not a chemical resistant coating
- Dark colour shades (especially black, dark red and blue, etc.) may fade more rapidly than other lighter colour shades. Fading will be dependant on ultra violet light exposure.
- A refresher coat to improve colour may be required at an earlier interval than usual.
- Where colour fade may occur, the protective properties of the coating will remain unaffected.

Do not apply when:

- Rain expected
- Relative humidity > 80%
- Temperature below +8°C and/or below dew point
- Concrete younger than 28 days

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

REGULATION (EC) NO 1907/2006 - REACH

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

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.

SIKA LIMITED

Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
Tel: 01707 394444
Web: www.sika.co.uk
Twitter: @SikaLimited



Product Data Sheet
Sikagard®-675 W GB ElastoColor
February 2020, Version 02.01
020303030010000028

Sikagard-675WGBElastoColor-en-GB-(02-2020)-2-1.pdf