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# PRODUCT DATA SHEET Sikagard®-670 W Elastocolor

# COATING PROTECTION FOR CONCRETE

## **PRODUCT DESCRIPTION**

Sikagard<sup>®</sup>-670 W Elastocolor is a one component protection coating against carbonation, based on water dispersed acrylic resins, which produces a matt finish.

## USES

- As anticarbonation coating on cement mortar or reinforced concrete surfaces
- To protect façades and concrete elements and as aesthetic finishing without altering the substrate texture.
- As preventive protection of new reinforced concrete structures on aggressive environment
- As protective and decorative coating on repair work with Sika Top and Sika Monotop systems
- To protect fibre reinforced concrete

# **CHARACTERISTICS / ADVANTAGES**

- High CO2 diffusion resistance, reducing the carbonation speed
- Water vapour permeability, allowing substrate to breathe.
- Excellent weathering and ageing resistance
- Waterproof to rain (prevents water penetration)
- Ecological, solvent free.
- Easy to apply.

# **APPROVALS / STANDARDS**

Product for protection against the penetration, humidity control and resistivity increase (coating) following EN 1504-2:2004, with Declaration of Performance 01 03 03 03 006 0 0000001 1053, with the certificate of conformity of the factory production control number 0099/CPR/B15/0007

# **PRODUCT INFORMATION**

| Chemical Base           | Water dispersed acrylic resins   |  |  |  |
|-------------------------|--|--|--|--|
| Packaging               | Cans of 20kg.  |  |  |  |
| Appearance / Colour     | White, grey RAL 7030 y grey RAL 7032.<br>Other colours under request   |  |  |  |
| Shelf Life              | 12 months from date of production  |  |  |  |
| Storage Conditions      | If stored properly in undamaged and unopened, original sealed packaging in dry and cool conditions, protected from frosts. |  |  |  |
| Density                 | ~ 1,30 kg/l ( at +20ºC)  |  |  |  |
| Solid content by weight | ~45% by weight   |  |  |  |
| Solid content by volume | ~60% by volume   |  |  |  |

# SYSTEM INFORMATION

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| Normal Conditions:     |   |                        |
|------------------------|---|------------------------|
| System                 | Product   | Number of applications |
| D                      | Sikagard <sup>®</sup> -670 W Elast-<br>ocolor                           | 2                      |
| Absorbent sustrates    |   |                        |
| Priming                | Sikagard <sup>®</sup> -670 W Elast-<br>ocolor diluted in 5% of<br>water | 1                      |
| Top Coat               | Sikagard <sup>®</sup> -670 W Elast-<br>ocolor                           | 2                      |
| Marine environments, e | exposed concrete to dicing  | salts                  |
| Priming                | Sikagard <sup>®</sup> -711 ES   | 1                      |
| Top Coat               | Sikagard <sup>®</sup> -670 W Elast-<br>ocolor                           | 2                      |

Note: may need a third layer of Sikagard<sup>®</sup>-670 W Elastocolor depending of the porosity of the substrate or applied over a previous dark coating (well adhered)

## **APPLICATION INFORMATION**

| Mixing Ratio                  | For normal use Sikagard®-670 W Elastocolor is supplied ready to use.<br>Stir thoroughly prior to application<br>In case of very high or very low temperatures the viscosity can be adjusted<br>by adding a 2% water, previously removing their use.<br>If absorbent substrates, dilute the product by 5% maximum water, mix the<br>product well before applying. |                                 |                            |   |  |
|-------------------------------|--|---------------------------------|----------------------------|---|--|
| Consumption                   | Product Per layer  |                                 | r layer                    |   |  |
|                               | Hydrophobic impregnation Sik-<br>agard®  |                                 | Check Technical Data Sheet |   |  |
|                               | Sikagard <sup>®</sup> -670 W Elasto  |                                 |                            | 0.225 kg/m <sup>2</sup>                       |  |
| Layer Thickness               | Mín 60 micron (by layer)<br>Máx.120 micron (by layer)  |                                 |                            |   |  |
| Ambient Air Temperature       | +8º C min / +35º C max   |                                 |                            |   |  |
| Relative Air Humidity         | < 80%  |                                 |                            |   |  |
| Substrate Temperature         | +8º C min / +35º C max   |                                 |                            |   |  |
| Waiting Time / Overcoating    | Note: can be applied without priming if the existing coat has been through cleaned   |                                 |                            |   |  |
|                               | Previous coating   | Waiting time                    |                            | Next coating                                  |  |
|                               | Sikaguard <sup>®</sup> -552 W<br>Aquaprimer ES   | min 12 hours                    |                            | Sikagard <sup>®</sup> -670 W Elast-<br>ocolor |  |
|                               | Hydrophobic Impregna-<br>tions Sikagard®   | See data in the nical data shee |                            | Sikagard®-670 W Elast-<br>ocolor              |  |
|                               | Sikagard <sup>®</sup> -670 W Elast-<br>ocolor  | ~ 30 minutes                    |                            | Sikagard <sup>®</sup> -670 W Elast-<br>ocolor |  |
| Applied Product Ready for Use | Full cure:~4 hours at +23⁰C  |                                 |                            |   |  |

# **APPLICATION INSTRUCTIONS**

#### SUBSTRATE QUALITY / PRE-TREATMENT

#### Exposed concrete without old 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 blastcleaning.

New concrete must be at least 28 days old.

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Exposed concrete with existing coating: Existing coatings must be tested to confirm their adhesion to the substrate and their suitability - adhesion test average > 1 N/mm2 with no single value below 0.7 N/mm2.



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#### Insufficient adhesion

Must be removed by appropriate methods all old coatings and the substrate must be sturdy enough to be coated

Sufficient adhesion

Thoroughly clean the entire surface by blasting high pressure water or steam jet

For water based coating, use Sikagard-552 W Aquaprimer as primer.

In case of doubt, carry out adherence testing to determine which primer is most suitable – wait at least 2 weeks prior to conduct the adhesion test - an average value of 1.0 N/mm<sup>2</sup> is required with no single value below 0.7 N/mm<sup>2</sup>.

#### APPLICATION

Sikagard<sup>®</sup>-670 W Elastocolor can be manually applied by paintbrush or short piled roller or mechanically by «air-less».

The second layer product must be applied in perpendicular to the first direction to

achieve an optimal opacity.

For projection equipment airless, use the following:

- ~ 150bar pressure
- ~ 0.38 to 0.53 mm nozzle
- Application angle ~ 50-80

#### **CLEANING OF TOOLS**

Clean all tools and application equipment with clean water immediately after use.

Hardened / cured material can only be removed mechanically

## LIMITATIONS

Do not apply when there is:

- Expected rain
- Relative humidity >80%
- Temperature below +8°C and/or below dew point

Concrete younger than 28 days

The system is resistant to aggressive atmospheric influences. At temperature lower than 8°C in highly absorbent substrates and strong winds can cause cracks drying and reduced adhesion.

The system is resistant to aggressive atmospheric agents.

## VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

## 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 Material Safety Data Sheet containing physical, ecological, toxicological and other safetyrelated 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.

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