

## PRODUCT DATA SHEET

# SikaCor® EG-1

## High-Solid epoxy-based intermediate coat

Made in Germany

#### **DESCRIPTION**

SikaCor® EG-1 is a 2-pack intermediate coat based on epoxy resin containing micaceous iron oxide. Low solvent content according to Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).

#### **USES**

SikaCor® EG-1 may only be used by experienced professionals.

Designed as a mechanically resistant intermediate coat on steel surfaces exposed to atmospheric conditions, hot-dip galvanized steel, zinc-spray, stainless steel and aluminium.

In combination with 2-pack primer and top coats, Sika-Cor® EG-1 is a mechanically water and chemically resistant coating system for durable corrosion protection, corrosivity category C5 high according to ISO 12944-2.

## **CHARACTERISTICS / ADVANTAGES**

- Excellent adhesion to hot-dip galvanized steel, zinc spraying, stainless steel and aluminium
- High film thickness per coat (up to 120 μm)
- Very good corrosion protection
- Tough elastic and hard but not brittle
- Largely insensitive against shock and impact

## **APPROVALS / CERTIFICATES**

- Approved according to German standard 'TL/TP-KOR-Stahlbauten, Blatt 87'.
- Suitability on galvanizing according German guideline 'AGK B1'.
- Approved according to Austria standard RVS 15.05.11 and RVS 08.09.02 S11, S13, S16.

#### PRODUCT INFORMATION

| Packaging             | SikaCor® EG-1  | 30 kg, 15 kg and 3 kg net. |  |
|-----------------------|--|----------------------------|--|
|                       | Sika® Thinner EG   | 25 l, 10 l and 3 l         |  |
|                       | SikaCor® Cleaner   | 160 l and 25 l             |  |
| Appearance and colour | Grey metallic approx. DB 701   |                            |  |
|                       | Grey metallic approx. DB 702, matno. 687.12                                |                            |  |
|                       | Grey metallic approx. DB 703, matno. 687.13                                |                            |  |
|                       | Green metallic approx. DB 601, matno. 687.14                               |                            |  |
|                       | White  |                            |  |
|                       | Slight colour deviations are possible due to raw material characteristics. |                            |  |
| Shelf life            | 3 years  |                            |  |
| Storage conditions    | In originally sealed containers in a cool and dry environment.             |                            |  |
| Density               | ~1.6 kg/l  |                            |  |

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## **TECHNICAL INFORMATION**

| Chemical resistance    | Weather, water, sewage, seawater, smoke, de-icing salts, acid and lye vapours, oils, grease and short term exposure to fuels and solvents. |
|------------------------|--|
| Temperature resistance | Dry heat up to + 150°C, short term up to + 180°C<br>Damp heat up to approx. + 50°C<br>In case of higher temperatures please consult Sika.  |

## **SYSTEM INFORMATION**

| System | <u>Steel:</u>   |
|--------|---|
|        | Used as intermediate coat on 2-pack primer coats of Sika Deutschland            |
|        | GmbH for e.g.:  |
|        | <ul> <li>SikaCor® Zinc R</li> </ul>   |
|        | <ul> <li>SikaCor® Zinc R Rapid</li> </ul>                                       |
|        | <ul> <li>SikaCor® EG Phosphat</li> </ul>  |
|        | <ul> <li>SikaCor® EG Phosphat Rapid</li> </ul>                                  |
|        | <ul> <li>Sika Poxicolor® Primer HE NEW</li> </ul>                               |
|        | <ul> <li>As intermediate coat on 1-pack primer coat SikaCor® Zinc ZS</li> </ul> |
|        | Suitable top coats:   |
|        | Versatile overcoatable with 1 or 2-pack products of Sika Deutschland            |
|        | GmbH  |
|        | Hot-dip galvanized steel, thermal zinc spraying, aluminium and stainless        |
|        | <u>steel:</u>   |
|        | 1 x SikaCor® EG-1   |
|        |   |

1 x top coat (see above)

## **APPLICATION INFORMATION**

| Mixing ratio          |   | Components A: B |  |
|-----------------------|---|-----------------|--|
|                       | By weight   | 90:10           |  |
|                       | By volume   | 4.7 : 1         |  |
| Thinner               | Sika® Thinner EG  |                 |  |
|                       | If necessary max. 5% Sika® Thinner EG may be added to adapt the viscos-   |                 |  |
|                       | ity.  |                 |  |
| Consumption           | Theoretical material-consumption/VOC without loss for medium dry film thickness:  |                 |  |
|                       | Dry film thickness  | 80 μm           |  |
|                       | Wet film thickness  | 135 μm          |  |
|                       | Consumption   | ~0.215 kg/m²    |  |
|                       | VOC   | ~49 g/m²        |  |
|                       | With SikaCor® EG-1 up to 120 $\mu m$ dry film thickness can be achieved by airless spraying.  |                 |  |
| Material temperature  | Min. + 5°C  |                 |  |
| Relative air humidity | Max. 85 %, except the surface temperature is significantly higher than the dew point temperature, it shall be at least 3 K above dew point. |                 |  |
| Surface temperature   | Min. + 5°C  |                 |  |
| Pot Life              | At + 10°C   | ~12 h           |  |
|                       | At + 20°C   | ~8 h            |  |
|                       | At + 30°C   | ~5 h            |  |



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| Drying stage 6              |  | Dry film thickness 80 μm  | (ISO 9117-5) |  |
|-----------------------------|--|---|--------------|--|
|                             | + 5°C after  | 12 h  |              |  |
|                             | + 10°C after   | 9.5 h   |              |  |
|                             | + 20°C after   | 6 h   |              |  |
|                             | + 40°C after   | 75 min  |              |  |
|                             | + 80°C after   | 20 min  |              |  |
| Waiting time to overcoating | Min.: Until drying stage 6 is achieved. Higher layer thicknesses, but also lower temperatures than specified, lead to longer drying times. The overcoating intervals can be delayed and may need to be determined on site.  Max.: 4 years In case of longer waiting times please contact us.  Prior to further applications: After a waiting period or after exposure to weathering, all possible contamination must be removed from the surface before the subsequent coating is applied. |   |              |  |
| Drying time                 |  | hickness and temperature full hardnes<br>its of the completed coating system sh<br>uring. |              |  |

#### **BASIS OF PRODUCT DATA**

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

## **ECOLOGY, HEALTH AND SAFETY**

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

#### APPLICATION INSTRUCTIONS

#### **SURFACE PREPARATION**

#### Steel:

Blast cleaning to Sa 2  $\frac{1}{2}$  according to DIN EN ISO 12944-4.

Free from dirt, oil and grease.

Hot-dip galv. steel, stainless steel and aluminium: Free from dirt, oil, grease and corrosion products. In case of permanent immersion and condensation the surfaces must be slightly sweep blasted with a ferrite-free blasting abrasive.

Zinc spraying must be sealed and porefree.

For contaminated surfaces e.g. galvanized or primed areas we recommend cleaning with SikaCor® Wash.

#### **MIXING**

Stir component A very thoroughly using an electric mixer (start slowly, then increase up to approx. 300 rpm). Add component B carefully and mix both components very thoroughly (including sides and bottom

of the container). Mix for at least 3 minutes until a homogeneous mixture is achieved. Fill mixed material into clean container and mix again shortly as described above. During mixing and handling of the materials always wear protective goggles, suitable gloves and other protective clothings.

#### APPLICATION

The method of application has a major effect on achieving uniform thickness and appearance. Spray application will give the best results. The indicated dry film thickness is easily achieved by airless spray. Adding solvents reduces the sag resistance and the dry film thickness. In case of application by roller or brush, additional applications may become necessary to achieve the required coating thickness, depending on type of construction, site conditions, colour shade etc. Prior to major coating operations a test application on site may be useful to ensure the selected application method will provide the requested results.

#### By brush and roller

#### Conventional high pressure spraying:

- Nozzle size 1.5 2.5 mm
- Pressure 3 5 bar
- Oil and water trap is compulsory

#### <u>Airless-spraying:</u>

- Pressure min. 180 bar
- Nozzle size 0.38 0.53 mm (0.015 0.021 inch)
- Spraying angle 40°-80°

#### **CLEANING OF EQUIPMENT**

SikaCor® Cleaner



#### **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.

#### **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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