BUILDING TRUST

PRODUCT DATA SHEET

SikaCor® EG-1

HIGH-SOLID EPOXY-BASED INTERMEDIATE COAT

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 spraying, stainless steel and aluminium.
In combination with 2-pack primer and top coats, SikaCor® 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 / STANDARDS

- Approved according to German standard 'TL/TP-KOR-Stahlbauten', page 87.
- Suitability on galvanizing according German guideline 'AGK B1'.

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	25 L
Appearance / Colour	Grey metallic approx. DB 701 Grey metallic approx. DB 702, mat.-no. 687.12 Grey metallic approx. DB 703, mat.-no. 687.13 Green metallic approx. DB 601, mat.-no. 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	
Solid Content	~ 60 % by volume ~ 77 % by weight	

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.

Thermal Resistance

Dry heat up to +150 °C, short term up to +180 °C
Damp heat up to approx. +50 °C
In case of higher temperatures please consult Sika.

SYSTEM INFORMATION

Systems

Steel:
Used as intermediate coat on 2-pack primer coats of Sika for e.g.:
- SikaCor® Zinc R
- SikaCor® Zinc R Rapid
- SikaCor® EG Phosphat
- SikaCor® EG Phosphat Rapid
- Sika Poxicolor® Primer HE NEW
- As intermediate coat on 1-pack primer coat SikaCor® Zinc ZS

Suitable top coats:
Versatile overcoatable with 1 or 2-pack products of Sika

Hot dip galvanized steel, thermal zinc spraying, aluminium and stainless steel:
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 viscosity.

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	~ 49.1 g/m²

With SikaCor® EG-1 up to 120 µm dry film thickness per application can be achieved by spray.

Product 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

Drying Stage 6

	Dry film thickness 80 µm
+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

(ISO 9117-5)

Waiting Time / Overcoating	Min. until drying stage 6 is achieved Max. 4 years In case of longer waiting times please contact Sika. Prior to further applications possible contamination must be removed.
Drying Time	**Final drying time** Depending on film thickness and temperature full hardness is achieved after 1–2 weeks. Tests of the completed coating system should only be carried out after final curing.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Steel:
Blast cleaning to Sa 2 ½ according to ISO 12944-4.
Free from dirt, oil and grease.

Hot dip galvanized 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

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

CLEANING OF TOOLS

SikaCor® Cleaner

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 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 Material Safety Data Sheet (MSDS) containing physical, ecological, toxicological and other safety-related data.
Skin contact with epoxy resins can lead to allergies!
Avoid direct skin contact at all costs when handling epoxy resins!
For the selection of suitable protective equipment, we have made our information data sheets 7510 ‘General notes on occupational safety’ and 7511 ‘General notes for wearing protective gloves’ available at www.sika.de. In conjunction with this we also recommend the BG Bau service pages for information regarding the handling of epoxy resins (www.bgbau.de/gisbau/fachthemen/epoxi).

VOC DATA

VOC content (ready to use) not exceeding 380 gm/litre [Type of regulated paint under the Air Pollution Control (volatile organic compounds) Regulation of Hong Kong: (pre-treatment coatings for metal)].

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

SIKA HONGKONG LTD.
Rm.1507-12, 15/F, Block A,
New Trade Plaza,
6 On Ping Street,
Shatin, N.T.
Hong Kong.