

PRODUCT DATA SHEET

SikaCor® EG-1 Rapid Plus

Future name: Macropoxy® EG-1 Rapid Plus

Fast curing, high-solid epoxy-based intermediate coat

DESCRIPTION

SikaCor® EG-1 Rapid Plus is a fast curing, 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 Rapid Plus may only be used by experienced professionals.

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

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

CHARACTERISTICS / ADVANTAGES

- Low consumption per square meter
- Application at low temperatures till - 10°C
- Excellent adhesion to hot-dip galvanized steel, stainless steel and aluminium
- Very good corrosion protection properties

APPROVALS / CERTIFICATES

- Certificates for C5 high and very high acc. ISO 12944 are available
- Approved according to German standard 'TL-KOR-Stahlbauten, Blatt 97'

PRODUCT INFORMATION

Packaging	SikaCor® EG-1 Rapid Plus	28.5 kg net.
	Sika® Thinner EG	25 l, 10 l and 3 l
	SikaCor® Cleaner	160 l and 25 l
Appearance and colour	MIO color shades (containing micaceous iron oxide)	
	Grey DB702, mat.-no. 697.12	
	Grey DB703, mat.-no. 697.13	
	Green DB601, mat.-no. 697.14	
	Black	
	MIO-free color shades (free of micaceous iron oxide)	
	White	
	Slight colour deviations are possible due to raw material characteristics.	
Shelf life	2 years	

Storage conditions	In originally sealed containers in a cool and dry environment.	
Density	MIO color shades	~1.5 kg/l
	MIO-free color shades	~1.4kg/l
Solid content	MIO color shades	~66 % by volume
		~80 % by weight
	MIO-free color shades	~70 % by volume
		~81 % 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.
Temperature resistance	Dry heat up to + 150°C, short term up to + 200°C Damp heat up to approx. + 50°C In case of higher temperatures please contact us.

SYSTEM INFORMATION

System	Steel: Used as intermediate coat on 2-pack primers of Sika e.g.: ▪ SikaCor® Zinc R Rapid Plus ▪ SikaCor® EG Phosphat Rapid ▪ SikaCor® Zinc ZS Suitable top coats: Versatile recoatable with 1- and 2-pack products of Sherwin-Williams Coating Deutschland GmbH. Hot dip galvanized steel, aluminium and stainless steel: 1 x SikaCor® EG-1 Rapid Plus 1 x top coat (see above)
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APPLICATION INFORMATION

Mixing ratio	Components A : B	
	By weight	94.7 : 5.3
	By volume	11.5 : 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:	
	MIO color shades	
	Dry film thickness	80 µm
	Wet film thickness	121 µm
	Consumption	~0.182 kg/m²
	VOC	~36 g/m²
	The dry film thickness of SikaCor® EG-1 Rapid Plus in MIO containing color shades should not exceed 240 µm per layer.	
	MIO-free color shades	
	Dry film thickness	80 µm
	Wet film thickness	114 µm
	Consumption	~0.160 kg/m²
	VOC	~30 g/m²
	The dry film thickness of SikaCor® EG-1 Rapid Plus in MIO-free color shades should not exceed 320 µm per layer.	

Material temperature	Min. + 0°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. The surface must be dry and free from ice.	
Surface temperature	Min. - 10°C	
Pot Life	At + 10°C	~8 h
	At + 20°C	~5 h
	At + 30°C	~2 h
Drying stage 6		
	Dry film thickness 80 µm	(ISO 9117-5)
	+ 0°C after	12 h
	+ 5°C after	6 h
	+ 10°C after	5 h
	+ 20°C after	2.5 h
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.: 1 year 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	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.	

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 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 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 Sherwin-Williams' products, are given in good faith based on Sherwin-Williams' current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sherwin-Williams' 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. Sherwin-Williams 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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