BUILDING TRUST

PRODUCT DATA SHEET

SikaCor®-550 Blade

Very high solids 2-pack Acrylic-Polyurethane-Topcoat for Rotor Blades

DESCRIPTION

SikaCor®-550 Blade is a 2-pack acrylic-polyurethane topcoat with extremely low solvent content and with very good optical and mechanical properties.

Low solvent content referring to Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).

CHARACTERISTICS / ADVANTAGES

- Fast curing characteristics
- High mechanically resistant
- VOC content of approx. 240 g/l
- Very high weather resistance and colour retention

USES

Top coat for rotor blades.

PRODUCT INFORMATION

Packaging	SikaCor®-550 Blade, Comp. A	280 kg and 25 kg net.
	SikaCor®-550 Blade, Comp. B	200 kg and 7.5 kg net.
	Sika Thinner P	25 l and 5 l
	Other packaging upon request.	
Appearance and colour	RAL 7035, RAL 9018 and RAL 3020 Other colour shades upon request Gloss units (DIN 67530): 10 ± 5 GU at 60° measuring angle	
Shelf life	1 year	
Storage conditions	In originally sealed containers in a cool and dry environment.	
Density	~1.6 kg/l	
Solid content	~68 % by volume ~82 % by weight	

Viscosity

Product mix	Comp. (A)	(DIN 53019-1) Comp. (B)
$\dot{\gamma}$=250 s^{-1}: ~250 mPa s	$\dot{\gamma}$=250 s^{-1}: ~2 Pa s	$\dot{\gamma}$=500 s^{-1}: ~15 mPa s
$\dot{\gamma}$=5 s^{-1}: ~1000 mPa s	$\dot{\gamma}$=5 s^{-1}: ~13 Pa s	

TECHNICAL INFORMATION

Mechanical resistance	Resistant against erosion.
Tensile strain at break	25 % (DIN 53504) Tensile stress at yield: 15 MPa
Chemical resistance	SikaCor®-550 Blade in combination with the complete coating system is resistant against weathering.

SYSTEM INFORMATION

System	Rotor blade: 1 x SikaCor®-350 Blade (fine putty) 1 x SikaCor®-420 Blade (pore filler) 1 x SikaCor®-550 Blade (top coat)

APPLICATION INFORMATION

Mixing ratio

Components A : B

By weight	100 : 30
By volume	1.9 : 1

Consumption

Theoretical material-consumption/VOC without loss for medium dry film thickness:

Dry film thickness	120 µm
Wet film thickness	176 µm
Consumption	0.282 kg/m²
VOC	50.8 g/m²

Max. dry film thickness per layer: 200 microns

Material temperature

Min. + 15°C

Relative air humidity

Max. 85 %, surface temperature shall be at least 3 K above dew point.

Substrate temperature

Min. + 15°C

Pot Life

At 20°C / 20 % RH	~40 min
At 23°C / 50 % RH	~30 min
At 30°C / 80 % RH	~20 min

Curing time

Drying Stages (ISO 9117-5)

Climate	DS 1	DS 6	DS 7
+ 23°C / 50 % RH	3 h	4 h	5 h

Forced drying to achieve DS 7:
- 45 min drying at room temperature
- 60 min drying at 40°C
- 45 min drying at room temperature again

Waiting time to overcoating

Min.: Until drying stage 6 is achieved
Max.: 24 h

In case of longer waiting times the surface must be grinded.
Temporary storage and the transport of coated parts should be carried out using appropriate methods. Do not use shrink-wrap or any other type of packaging like plastic film.

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.

IMPORTANT CONSIDERATIONS

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

SUBSTRATE PREPARATION

Lightly sanding the surface carefully. The surface has to be clean, dry, dust free and free of any separating agents and contaminations.

MIXING

Stir component A very thoroughly using a mechanical 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 with 2-component airless equipment:
Stir component A thoroughly before and during application. Fill the material into the tanks of the plural component spraying equipment or put the suction hoses into the material container.

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 and by brush. 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 or roller:

Airmix-spraying:
Nozzle size 0.33 – 0.43 mm (0.013 – 0.017 inch)

Airless-spraying:
With plural component airless equipment, pressure of minimum 150 bar,
nozzle size 0.38 – 0.53 mm (0.015 – 0.021 inch), spraying angle 40° – 80°.

CLEANING OF EQUIPMENT

Sika® Thinner P

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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