

Sikafloor® 390 AS

Chemical resistant flexible coating
Electrically conductive as per DIN 51 953

Product description: Self-smoothing, electrically conductive, flexible 2-component binder based on epoxy resin of high chemical resistance.

solvent-free according to ibh-recommendation

Fields of application: Crack-bridging and chemically resistant coating for concrete and screed surfaces in bund areas for the protection against water contaminating liquids of classes A1, AII or B. Electrostatically conductive wearing layer according to DIN 51 953 for areas likely to crack, subject to chemical exposure.

Properties:

- o chemically resistant
- o crack-bridging
- o impervious to liquids
- o quick curing
- o electrostatic conductivity according to DIN 51 953.

Colour shades: pebble grey approx. RAL 7032
stone grey approx. RAL 7030
dusty grey approx. RAL 7037

Packaging: Sikafloor 390 AS: 10 kg, 25 net.

Shelf life: In original sealed containers and in cool and dry environment min. 1 year.



Product data.

**Coating system/
material consumption:**

	Product	Material consumption
Priming coat	Sikafloor 156	0,3-0,5 kg/m ²
Levelling up (optionally)	Sikafloor 156	see technical data sheet Sikafloor 156
Electrodes	Sikafloor copper tape with Sikafloor electrode set	see application methods
Conductive coat	Sikafloor 210 Conductive	0,1-0,15 kg/m ²
Wearing layer	<u>Horizontal areas</u> Sikafloor 390 AS <u>Vertical areas</u> 2x Sikafloor 390 AS plus 2,5-4% Extender T	2,5 kg/m ² min. 1,25 kg/m ² per application

Mixing ratio.

Sikafloor 390 AS: 85 pbw comp. A
 15 pbw comp. B

Technical data:

type	testing standard	final curing	mean value
specific gravity	DIN 53 217		1,6 kg/ltr
crack-bridging	BGP	7 d/70 °C	0,3 mm
elongation at break	DIN 53 455	8 d/23°C/50% r.h.	20%
Taber Abraser CS 10/100/1000	DIN 53 109	8 d/23°/50% r.h.	75 mg
tensile strength	DIN 53 455	8 d/23°C/50% r.h.	10 N/mm ²
electrical resistance R _E	DIN 51 953	96 h/23°C	10 ⁴ -10 ⁶ Ohm
Shore hardness D	DIN 53 505	14 d/23°C/50% r.h.	60

Resistance:

Minimum 42 days permanent immersion in:

No. group

1. petrol (3- and 4-star
2. aviation fuel
3. diesel and heating fuel
4. aromatic hydrocarbons
5. alcohols, glycoether
7. aliphatic esters and ketones
8. aliphatic aldehydes
9. dispersions of organic acids up to 10% concentration
10. acids in watery dispersion (pH < 6) up to 20% (except hydrofluoric acid) as well as oxidizing acids and their salts. sulfuric acid up to 80%
11. anorganic lyes as well as alkaline hydrolysing salts in watery dispersion (pH > 8) up to 20%

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12. salt solutions (pH 6-8)
 13. amines
 14. watery dispersions of organic tensides

Mechanical resistance:

Sikafloor 39 AS is suitable for medium industrial wear.

Thermal resistance:

dry heat short-term up to +100 °C
cleaning with warm water up to +80 °C

Hints on application.

Condition of substrate:

The substrate must be of sufficient strength (min. compressive strength 30 N/mm²), dry, clean, free from fat and oil. Priming and levelling depending on type of substrate. The pull-off strength should not be below 1,5 N/mm².

Surface preparation::

Sikafloor 210 Conductive must be cleaned from contamination.

Mixing:

Stir component A thoroughly prior to mixing. Mix component A + B intensively in the right mixing ratio by means of an electric stirrer (approx. 300-400 rpm).

Mixing time at least 3 minutes until a homogeneous mixture is achieved. Fill mixed material into a clean container and mix again shortly.

Application method:

Levelling up:

Excessive or too thin layer thicknesses of Sikafloor 390 AS, e.g. resulting from rough surfaces, will influence the conductivity. In case of pattern depth > 0,5 mm a levelling up with e.g. Sikafloor 156 is strictly necessary.

Placing of electrodes:

Copper electrodes are fixed (e.g. by Sikafloor copper tape) to the edges of the primed respectively levelled up and cleaned floor surface at distances of not more than 10 m, penetrating into the floor approx. 20-30 cm, running vertically up the walls. For hints of installation see Sikafloor Electrode set.

The free ends of the copper tape (or strand wire) are drawn up the walls and connected with a ring main or directly to a suitable earth connection. The installation of the ring main or the connection of the copper tapes to the earth connection cable should be carried out by a professional.

Application of Sikafloor 210 Conductive:

Sikafloor 210 Conductive is applied evenly by roller or brush. After final curing a conductivity test is strongly recommended.

Attention: Only start application of Sikafloor 210 Conductive after the priming coat has dried tack-free all over. Otherwise there is a risk of wrinkling or impairing of the conductive properties.

Top coat:

Sikafloor 390 AS is poured onto horizontal surfaces and smoothed to the desired layer thickness by means of twinblade or serrated trowel and ventilated intensively with a spiked roller.

On inclined or vertical surfaces apply 2 layers, adding approx. 2,5-4 pbw of Extender T.

Ambient and substrate temperature:

Min. + 10 °C (but at least 3 °C above dew point)
Max. + 30 °C.
Relative air humidity max. 85%

Pot life:

	+10 °C	+20 °C	+30 °C
Sikafloor 390 AS	approx. 2 h	approx. 60 min.	approx. 30 min.

Waiting times between applications:

		+10 °C	+20 °C	+30 °C
Sikafloor 156	min. max.	36 h 6 days	24 h 4 days	12 h 2 days
Sikafloor 210 Conductive	min. max.	24 h 7 days	15 h 7 days	10 h 7 days
Sikafloor 390 AS	min. max.	1 day 2 days	12 h 24 h	6 h 12 h

Sikafloor 390 AS; 3/4

Final curing:

Sikafloor 390 AS		+10 °C	+20 °C	+30 °C
ready for foot traffic	after	2 days	1 day	18 hours
light mechanical wear	after	5 days	3 days	2 days
full serviceable	after	7 days	7 days	5 days

Overworkability:

With itself after thorough blastcleaning or grinding.

Overcoating will most certainly result in a loss of conductivity. To maintain desired properties, another coat of Sikafloor 210 Conductive will have to be applied, properly earthed and subsequently overcoated again with Sikafloor 390 AS.

Cleaning of implements:

Thinner C.

Precautionary measures:

Component B of Sikafloor 390 AS falls under the dangerous goods regulations (class 8). Observe safety advice printed on label.

In a liquid state the product as well as the thinner contaminate water and should not get into drains, water and soil.

In any case remnants of thinner and material must be disposed according to regulations.

During application in closed rooms, pits and shafts etc. sufficient ventilation must be provided. During application and curing of Sikafloor 210 Conductive, keep away open light including welding.

Furthermore, in badly lit rooms only electric safety lamps are permitted. The installed ventilation equipment must be spark-proof.

Further details are contained in our instructions "Health protection and prevention of accidents".

The information given in this data sheet is based on many years experience and is correct to the best of our knowledge. As the information given therein is of general nature, we cannot assume any responsibility nor as regards to patent/trademark rights of third parties. Success will always depend on the peculiarities of the individual case. We also refer to our standard conditions of sale. Please consult our technical department for further information.

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