



## SILIPOX® 7220

## Self levelling coating

### PRODUCT DESCRIPTION

#### Usage / Properties:

##### SILIPOX® 7220 is:

- solvent free
- coloured
- pre-filled
- epoxy resin based

##### SILIPOX® 7220 is suitable for:

- for inside areas in layer thicknesses between 1 and 3 mm
- for industrial and commercial objects with high mechanical load

##### Special properties of SILIPOX® 7220:

- tough
- glossy
- easy to clean, easily de-contaminable
- high abrasion resistance

SILIPOX® 7220 is normally used for smooth coatings. Through the addition of aggregates, anti-slip coatings can be made in accordance with the requirements of the respective trade association. The product can be used in permanent wet areas.

Priming is always necessary. We recommend, dependent on the substrate, to use SILIPOX® 7110, SILIPOX® 7115, SILIPOX® 7114 or SILIPOX® 7118.

#### Colour / delivery unit / Shelf life

Colour:	According to the colour card, further colours on request
Delivery unit:	30 kg; further container sizes on request
Shelf life:	12 months after production date Dry, cool and free of frost

## TECHNICAL DATA

Density at 23°C / 50 % rel. hum. of air	Approx. 1,56 g/cm <sup>3</sup>
Adhesive strength	> concrete fracture
Solid contents	approx. 100 %
Shore-hardness	D > 75
Compressive strength	approx. 90 N/mm <sup>2</sup> (filled)
Elastic modulus	approx. 40 N/mm <sup>2</sup> (filled)
Viscosity (25°C, V03.1, V03.4)	Component A: 2.700 – 4.100 mPas
	Component B: 200 – 300 mPas
Mixing ratio:	5 : 1 (by weight)
	4,2 : 1 (by volume)
Material consumption:	1,5 kg/m <sup>2</sup> /mm layer thickness
	Minimum layer thickness: 1 mm
	Recommendation: 1,8 – 2,25 kg/m <sup>2</sup>
Processing time (at 50% rel. hum. of air)	15 – 20 minutes (30°C)
	30 – 40 minutes (20°C)
	60 – 80 minutes (10°C)
Tack free time (at 50% rel. hum. of air)	min. 6 – 8 hours, max. 6 hours at 30 °C
	min. 8 – 12 hours, max. 12 hours at 20 °C
	min. 18 – 30 hours, max. 24 hours at 10 °C
Curing (complete mechanical stress at 50% rel. hum. of air))	3 days (30 °C)
	7 days (20 °C)
	10 days (10 °C)

## Processing:

### Substrate:

The substrate must be non-slip, clean, to be able to take loads and to be free of separating substances like fats, oils, etc. and at least dry. Proper substrate treatment by e.g. shot blasting or similar processes is necessary for a sufficient bond to the substrate. After the treatment, the peel strength should be at least 1,5 N/mm<sup>2</sup>. The residual moisture in the substrate should not exceed 4%. Furthermore, rearward moisture penetration should be excluded.

Application takes place on a prepared and primed substrate. Dependent on the preparation work done to the substrate, the material usage may vary.

The coating may be applied directly to the primer within the recoating time. If this recoating time is exceeded, then the recently applied and still wet area has to be broadcasted with fire-dried quartz sand in advance or otherwise this area has to be prepared by grinding after curing for the next layer.

### Tools:

Smoothing trowel. Triangular teethed trowel or similar

### **Mixing:**

Pour the curing agent completely into the main component. Mix intensively with a slow rotating stirrer (recommendation: double stirrer with shafts that rotate in opposite directions). Pour into a different vessel and mix again to avoid bad spots.

Before applying onto the substrate, a homogeneous mass, free of streaks must be achieved.

SILIPOX® 7220 is ready formulated. However, the mixture can be mixed 100 : 30 with fire-dried quartz sand (grain size 0,125-0,355 mm)

### **Application:**

The product is poured onto the surface and spread evenly with a trowel – preferably triangular teathed – or smoothing trowel.

If needed, a spiked roller can be used for deaeration.

Upon bigger areas, care regarding the processing time has to be considered to avoid / minimize edges.

### **General:**

Material, air and substrate temperatures must be measured and must be between 5 °C and 30 °C during the whole application.

Furthermore, care must be considered that the substrate temperature is always 3 °C above the dew point temperature.

Relative humidity of air may not exceed 80 %.

The product should be applied at a constant or decreasing temperature in order to avoid blistering by expansion of air in the substrate. Good ventilation after application and during curing must be ensured.

During the complete curing phase, the area has to be protected against direct contact with water.

When exposed to UV radiation, a certain change in colour and shade or chalking must be expected with epoxy resins. The technical properties are not affected.

The whitening of epoxy resins had to be considered when selecting colour and area of application.

Further information for chemical resistance can be requested.

## **Cleaning**

For cleaning the tools, we recommend our **R 1000**.

Hardened material can only be removed mechanically

## **CE-LABELLING**

Products which fall under specifications regulated by a harmonized standard or for which a European Technical Assessment has been issued have be labelled in accordance with Annex III of Regulation (EU) No 305/2011 (Construction Products Regulation) with the CE-mark.

EN 13813: 2002 „Screed material and floor screeds – screed materials – properties and requirements“ sets the rules for screed materials used for floor construction indoors. Coatings and Sealers are included in this regulation as well.

The EN 1504-2: 2004 „Products and systems for the protection and repair of concrete structures- Definitions, requirements, quality control and evaluation of conformity – Part 2: Surface protection systems for concrete“ specifies the requirements for hydrophobic impregnations, impregnations and coating, which are used for the surface protection of concrete. Flooring systems that are exposed to significant mechanical stresses also have to fulfil the requirements of the EN 13813.

For more detailed information please refer to the corresponding declaration of performance.

## **SAFETY INFORMATION:**

For safe handling of epoxy resins and their curing agents we do recommend attention to the following leaflets as a matter of principle:

Leaflet BG-Regel BGR 227, Handling of epoxy resins. (Ed.: Berufsgenossenschaft der Chemischen Industrie).

Furthermore, the relevant physical, safety-related, toxicological and ecological data have to be taken from the specific material safety data sheets.

Disposal:

Completely cured material may be disposed via domestic waste.

Hand residual emptied units over to Recycling.

Liquid material must be disposed of as paint waste which contains solvents or other dangerous substances.

VOC-Directive 2004/42/EG:

Category IIA/j Type Ib < 500 g/l VOC

GISCODE: RE 30

Data base:

The determination of all the data and application information is based in laboratory tests. Measured values in practice may differ because of influences beyond our control.

Legal foundation:

The following specifications as well as the recommendations for handling and use of our products are based upon our knowledge and experience under normal conditions, at proper storing and application. Because of different materials, substrates and working conditions other than given normal values, a warranty of a working result or a liability – for whatever legal relationship - cannot be justified from these instructions or a verbal guidance respectively, unless intent or gross fault can be imputed to us. Here, the user must prove that he had transferred in written form, in time and completely every knowledge that is necessary for an appropriate and promising estimation. The user is obliged to test the products on their suitability for the intended purpose. Incidentally, our respective terms and conditions of business are valid. You get these on [www.gremmler.de](http://www.gremmler.de). Only the newest edition of this technical data sheet is valid.

**WST Quarz GmbH**  
**LISE-MEITNER-STRASSE 5**  
**46569 HÜNXE**

**TELEFON: +49 (0)281 944 03 10**  
**FAX: +49 (0)281 944 03 33**  
**info@wst-quarz.de**  
**www.wst-quarz.de**