



**GREMMLER®**

**BAUCHEMIE**

## GI 123 All-purpose resin

- Solvent free, tintable and fillable epoxy resin for the making of 0.5 – 2 mm coatings

### Product description

### Application / Properties

GI 123 is a solvent free, filled and non-pigmented epoxy resin based dual-component reaction plastic. The product is used in inside areas upon industrial and commercial areas with medium up to high mechanical and chemical stress. Classical areas of application are for example storage halls, workshops, dairies, laboratories, showrooms, power plants, chemical plants and parking areas. Use in outside areas is possible but should extensively be tested in advance.

Generally smooth coatings are made by the use of GI 123. Antiskid coatings according to the requirements of respective trade associations are designable with the addition of special fillers. The product may also be applied in permanently wet areas.

A primer is always required. We do recommend the use of GI 110, GI 115 or GI 118 dependent on substrate.

Coatings made with GI 123 are tough, glossy, easy to clean, easy to decontaminate and feature high abrasion resistance.

In its completely cured state GI 123 is resistant to water, seawater and sewage water. It is also resistant to many lye solutions, diluted acids, salt solutions, mineral oils, lubricants, fuels and many solvents (discoloration is possible). For areas with higher chemical stress, we recommend our products GI 129, GI 139 or GI 159.

A certain amount of colour change and chalking must be expected under the influence of UV light because of the binding material that has been used. Epoxy resins tend to chalking. This has to be considered by choosing colour and intended use.

### Colour / Package item / Shelf life

**Color:**  
beige

**Package item:**  
10 kg, 30 kg; other units on request

**Shelf life:**  
12 months after production date  
Storage in original sealed units  
Dry, cool and free of frost

### TECHNICAL DATA:

**Density at 23 °C / 50 % rel. hum. of air:**  
approx. 1.49 g/cm<sup>3</sup>

**Adhesive strength:**  
> Concrete fracture

**Shore-hardness:**  
D > 70

**Solids content:**  
100 %

**Viscosity (25 °C, V03.4):**  
Component A: 1.500 – 2.400 mPas  
Component B: 350 – 450 mPas  
Mixture viscosity: approx. 1.200 mPas



## APPLICATION

### Mixing ratio:

4 : 1 (by weight)  
2.5 : 1 (by volume)

### Material consumption:

600 – 800 g/m<sup>2</sup> as sealing material  
1.5 kg/m<sup>2</sup>/mm layer thickness (unfilled)  
Minimal layer thickness: 0.5 mm

### 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. 12 hours at 30 °C  
min. 8 – 12 hours, max. 24 hours at 20 °C  
min. 18 – 30 hours, max. 48 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)

### Application/Substrate:

The substrate has to be non-slip, clean, to be able to take loads and to be free of separating substances like fats, oils, etc. and at least damp dry.

Coating is carried out on a prepared and primed substrate. Depending on the kind of surface preparation and therefore the roughness of the substrate the material consumption 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.

### Application/Tools:

Trowel, scraper - preferably with triangular toothed blades

### Application/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 there intensively again to avoid bad spots. Mix the ready premixed coating mass with Grepox SLD within a ratio of 1 : 1. Before applying onto the substrate a homogeneous mass, free of streaks has to be achieved.

### Application:

The product is poured onto the prepared area. For making top coats the product is uniformly spread criss-cross by use of a roller with short or medium-sized fur.

For making textured top coats the product is spread with a scraper with small triangular toothed blades and afterwards uniformly criss-cross structured by the use of special rollers.

Self levelling coatings are uniformly spread on the floor with a trowel or a scraper - preferably with triangular toothed blades.

If necessary deaeration can be made by use of a spiked roller. In case of perturbations arising from the substrate the coating indeed has to be deaerated.

Upon bigger areas, care regarding the processing time has to be taken into account to avoid / minimize colour differences and edges.

### Application/General:

Material, air and substrate temperatures have to be measured and have to be between 10 °C and 30 °C during the whole application.

Furthermore care has to be taken into account 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 has to be ensured.

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



## CE-LABELLING:

Products which fall under specifications regulated by a harmonized standard or for which a European Technical Assessment has been issued have to be labeled 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.

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

## SAFETY INFORMATION:

Only for professional users.

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 has to 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  
(limit 2010)

### 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 has to 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.

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