

GI 212

Decorative binder

- Tough-elastic
- Total Solid according to the test method of Deutsche Bauchemie
- Biobased content



GREMMLER®
BAUCHEMIE

Product description:	GI 212 is a solvent free, unfilled and non-pigmented polyurethane-resin based dual-component, light and weather resistant reaction plastic.
Usage area:	<ul style="list-style-type: none">• Binder for decorative synthetic resin screeds / stone carpet floors inside as well as outside.
Usage:	<ul style="list-style-type: none">• As sealing: for decorative floor coatings with structured surfaces like full flakes coatings etc.• As binder: for the making of industrial and decorative synthetic resin screeds / stone carpet floors. Recommendation: synthetic resin screeds and stone carpets should be refreshed with GI 212 after a maximum of 24 months to preserved the optic.
Properties:	<ul style="list-style-type: none">• Binding agent is tough elastic, so the decorative coating can be applied under floor-heated areas (max. flow temperature of 35 °C).• GI 212 visually enhances the colours of the decorative floors and makes them appear many times more intensive and powerful.
Substrate:	<ul style="list-style-type: none">• Priming under stone carpet floors necessary. For example: GI 110 or GI 115.

Technical Data

Colour:	Transparent
Pack size:	30 kg; other units on request
Storage life:	From production date 12 months; store in original containers; dry, cool, frost free
Density at 23°C / 50 % air humidity: EN ISO 2811-1:2011	Approx. 1.09 g/cm ³
Adhesive pull strength: EN 1542	> Concrete fracture
Shore hardness: ISO 7619-1:2012	D > 55
Solid parts	Approx. 100 %
Viscosity (25 °C, V03.4): EN ISO 2884-1:2006	Component A: 680 – 1020 mPas Component B: 550 – 850 mPas
Mixing ratio:	2 : 3 (By weight) 1 : 1.3 (By volume)
UV-resistance:	A slight change in colour and some chalking is expected. Polyurethanes with this composition only have a very small chance of colour change and chalking when under influence of UV-radiation. Due to the permeability of plastics to UV-radiation it is necessary to take into account, that the light-stable coating system components need to have this property as well.
Chemical resistance:	When completely cured resistant against: Water, sea and wastewater, numerous brines, diluted acids, saline solutions, mineral oils, lubricants, fuels and many solvents (with some materials a change in colour is possible). We advise to carry out suitability tests in advance.

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Processing Data:

Material usage:	As sealing: 300 g/m ² – 600 g/m ² dependent on the substrate 1:12.5 to 1:20 as screed dependent on the grading curve, application and the open porosity of the finished layer. These values are dependent on how the product is processed and on the substrate. The values are therefore only for a rough estimate.
Processing time (50 % air humidity):	15 – 22 minutes (30 °C) 30 – 45 minutes (20 °C) 60 – 90 minutes (10 °C)
Revision time (50 % air humidity):	Min. 4 – 6 hours, max. 12 hours at 30 °C Min. 8 – 10 hours, max. 24 hours at 20 °C Min. 16 – 20 hours, max. 48 hours at 10 °C
Curing time (complete mechanical stress at 50 % air humidity):	3 days (30 °C) 7 days (20 °C) 10 days (10 °C)
Processing temperature:	10 – 30 °C

Processing:

Preparation of the substrate:	<ul style="list-style-type: none">• Substrate must be dry, clean, rough, stable and free of separating substances like oil, fats etc.• Sealing with GI 212: Within the revision time on a recently coated area, a fresh stone carpet or synthetic resin screed. Stone carpets and synthetic resin screeds are sealed again after intensive cleaning took place.• Stone carpets are applied on prepared and primed area. The primer should be partially sprinkled in any case. For this purpose, the grain of the top covering should preferably be used to achieve a certain resistance and therefore an easier installation.
Tools:	<ul style="list-style-type: none">• Rubber slider, short or medium piled roller, trowel, levelling iron, smoother, etc.
Mixing:	<ul style="list-style-type: none">• Pour the curing agent completely into the resin compound.• Mix intensively with slow turning mixer (we advise a double stirrer with the stirring units turning the opposite direction to each other).• Fill into another vessel and mix again.• Before applying to the substrate make sure to have an even and smear-free mixture
Application: Sealant:	<ul style="list-style-type: none">• For the sealing of stone carpets the product is applied evenly spread with a short or medium piled roller while rolling in a cross shaped pattern.• The product is rolled onto open-poured coatings using a scraper grid.• It is essential to ensure an even application in order to avoid foaming and visual impairments.• In case of bigger areas care must be taken to work on in time in order to minimize overlapping traces and colour differences.

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Stone carpet:

- The finished binder GI 212 is homogeneously mixed with the aggregate in the compulsory mixer, spread over the area, the appropriate layer thickness set using levelling irons and then manually or mechanically compacted.
- A high binder content can lead to foam and bubble formation in the lower area of the screed.
- Sealing must be carried out within the revision time.
- In case of bigger areas care must be taken to work on in time in order to minimize overlapping traces and colour differences.

Processing conditions:

- The material, air and ground temperature must be between 10 °C and 30 °C during the processing, installation and curing time.
- The substrate temperature must be at least 3 °C above the dew point.
- The air humidity must be always between 40 % and 80 %.
- The application should take place when temperature is at a constant or falling value to avoid blisters because of the extension of air inside the substrate. It is important to keep an eye on the ventilation during and after the application. The area must be protected from any direct water contact during the whole curing time.

Further information:

CE-label:	DIN EN 13813: 2002
Safe Handling:	The product is intended for professional use. Leaflet M044, production and processing of Polyurethanes and isocyanate. Please note the current safety data sheets.
VOC-content:	VOC-directive 2004/42/EG: Category IIA/j type Ib < 500 g/l VOC
Disposal:	Disposal with the assistance of a disposal specialist under consideration of the current safety data sheets.
GISCODE:	PU 20
Sustainability:	Biobased content: approx. 21 %

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. Only the newest edition of this technical data sheet is valid.