



GI 118

Rapid

Primer and mortar resin

- For critical substrates
- In 2 layers against rearward moisture penetration

Product description:	GI 118 is a solvent-free, unfilled and transparent curing dual component reaction plastic based on epoxy resins.
Usage area:	Primer under solvent-free coating systems for inside and outside areas
Usage:	<ul style="list-style-type: none">• Formulation of moisture compatible filler and mortar systems• For small areas
Properties:	<ul style="list-style-type: none">• Medium-viscous• AgBB compliant according to the formulation• Very good adhesion on: Tiles, metallic substrates like aluminium, steel, zinc, brass etc., old coatings, various plastics as well as further critical substrates• Suitable for rearward moisture penetrated areas, the water-vapour transmission and the CO₂ permeability have been tested by Kiwa Polymer-Institut GmbH (test reports: P11342, P11341)
Substrate:	<ul style="list-style-type: none">• Residual moisture: < 6 % cement-based substrates (by CM method) 1 mass % weight anhydride screed

Technical Data:

Colour:	Transparent, yellowish
Pack size:	1 kg, 5 kg, 10 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. 1.10 g/cm ³
Adhesive pull strength: EN 1542	> Concrete fracture
Shore hardness: ISO 7619-1:2012	D > 75
Solid parts:	Approx. 100 %
Viscosity (25 °C, V03.4): EN ISO 2884-1:2006	Component A: 1100 – 1700 mPas Component B: 430 – 630 mPas
Mixing ratio:	4 : 1 (by weight) 3.75 : 1 (by volume)
UV-resistance:	A slight change in colour and some chalking is expected.
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.

Processing data:

Material usage:	250 – 400 g/m ² as primer for smooth substrates (rough substrates lead to a higher usage) 700 – 900 g/m ² (in two layers against rearward moisture penetration) 1:10 – 1:25 as mortar depending 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 (at 50 % air humidity):	4 – 8 minutes (30 °C) 8 – 15 minutes (20 °C) 35 – 55 minutes (10 °C)
Revision time (at 50 % air humidity):	Min. 2 - 3 hours, max. 6 hours at 30 °C Min. 4 - 5 hours, max. 12 hours at 20 °C Min. 16 - 20 hours, max. 24 hours at 5 °C
Curing time (complete mechanical stress at 50 % air humidity):	3 days (30 °C) 7 days (20 °C) 10 days (5 °C)
Processing temperature:	5 - 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.• Must be grinded or blasted. Depending on the preparation work, the surface may be rough in some places which will influence the consumption.• Iron and Steel areas are to be prepared by removal of rust until a standard degree of purity Sa 2.5 according to DIN 55928.
Tools:	<ul style="list-style-type: none">• Rubber slider, short or medium piled roller, trowel, toothed squeegee, smoothing trowel, 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: Primer:	<ul style="list-style-type: none">• Apply the product with rubber slider and evenly spread with short or medium piled roller in a cross pattern.• When using for protection from rearward moisture penetration, GI 118 must be applied in two separate layers. The first layer may not be broadcasted as the protective properties may be lost.• If the revision 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 after curing by grinding for the next layer.
Self-levelling filler up to 2mm:	<ul style="list-style-type: none">• The ready-to-apply coating GI 118 is mixed 1:1 with Grepox SLD (20 °C, dependent on temperature).• The filler is poured onto the prepared area and evenly spread with a toothed squeegee or a smoothing trowel.

Mortar:	<ul style="list-style-type: none"> • The product is poured onto the prepared area, the appropriate layer thickness is adjusted by use of metal profiles and then the coating is manually or mechanically compressed. • For layer thicknesses > 1 cm, intermediate compression should be used to ensure sufficient adhesive strength of the mortar.
Processing conditions:	<ul style="list-style-type: none"> • The material, air and ground temperature must be between 5 °C and 30 °C during the processing, installation and curing time. • At temperatures above 20 °C the product must be applied quickly. It is recommended to switch to smaller units at higher temperatures. • The substrate temperature must be at least 3 °C above the dew point. • The air humidity should not be above 80 % at any time. 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 DIN EN 1504-2: 2004
Safe handling:	The product is intended for professional use. DGUV Rule 113-012: Handling with Epoxy resins Please note the current safety data sheets.
VOC-contents:	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:	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 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.

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