

GI 166-002

EP-Adhesive

- KTW certified
- Universally useable
- Pigmented
- Total Solid according to the test method of Deutsche Bauchemie



Product description:	GI 166-002 is a mineral filled reaction plastic based on epoxy resin
Usage area:	<ul style="list-style-type: none">• Gluing of synthetic tapes for the purpose as sealant; repair of mineral based substrates; gluing of concrete and natural stones
Usage:	<ul style="list-style-type: none">• Construction adhesive for minerally bound substrates• Filler for sealing of wide cracks• Repair of damaged joints in industrial floor surfaces• Flex band glue for expansion and movement joints as well as for moving cracks
Properties:	<ul style="list-style-type: none">• Thixotropic and adjusted for filling• Good adhesive strength, high stability and little shrinkage• Useable vertically, horizontally and overhead• Fulfils the requirements for repair systems for tanks in drinking water installations, where a maximum of 1% of the total wetted surface is affected by the repair (P3) in contact with drinking water according to the coatings guideline for drinking water contact (cold water, registration number: Z- 364025-22-Hy203 Rev.01)• Not usable for reinforcement and repair purposes according to EN 1504-4
Substrate:	<ul style="list-style-type: none">• Minerally bound substrates• Concrete residual moisture: < 4 % (tested by CM)

Technical Data

Colour:	Grey-brown
Pack size:	6 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. 1.8 g/cm ³
Adhesive pull strength: EN 1542	> Concrete fracture
Compressive strength: EN 12190	Approx. 75 – 80 N/mm ²
Elastic modulus: EN 13412	Approx. 10.000 – 12.000 N/mm ²
Shore hardness: ISO 7619-1:2012	D 83 - 87
Solid parts	Approx. 100 %
Viscosity (25 °C, V03.4): EN ISO 2884-1:2006	Componente A: paste-like Componente B: paste-like
Mixing ratio:	1 : 1 (by weight)
UV-resistance:	A slight change in colour and some chalking is expected.

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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:	Approx. 1.8 kg/m ² unfilled 0.8 – 1.1 kg per running meter flex tape (width 200 mm) 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):	20 – 30 minutes (30 °C) 40 – 60 minutes (20 °C) 90 – 120 minutes (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.• Must be grinded or blasted. Depending on the preparation work, the surface may be rough in some places which will influence the consumption.• The concrete parts to be bonded must be a minimum of 28 days old.• We do recommend to carry out suitability testing in advance.
Tools:	<ul style="list-style-type: none">• As required: trowel, smoothing trowel etc.
Mixing:	<ul style="list-style-type: none">• The single components have to be stirred before use.• Curing compound to be poured into 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:	<ul style="list-style-type: none">• Depending on application the product has to be uniformly applied onto the parts which have to be glued via trowel, smoothing trowel, scraper with toothed blades or similar.• Pay attention that the bonding is carried out holohedral and free of hollow spaces.• Directly after applying the adhesive, the two to be bonded components need to be pressed against each other.• At bonding on vertical and overhead areas the construction parts have to be fixed for at least 12 hours depending on temperature and layer thickness.• By application as flex tape adhesive the tape is directly pressed onto the freshly spread adhesive GI 166-002 and will be levelled out afterwards again with GI 166-002.

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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 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.
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Further information:

Safe Handling:

The product is intended for professional use.
DGUV Rule 113-012: Handling with Epoxy resins
Please note the current safety data sheets.

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.