GI 237 Flex

Polyurea top coat

- **Flexible**
- **Lightfast**
- **Pigmented**
- **Biobased content**

Product description:	GI 237 Flex is a solvent-free, coloured, high opaque and semi-glossy hardening sealing and coating material based on an aspartic acid ester for cement and reaction plastic bound substrates.
Usage area:	• Inside and outside area: pergolas, path markings, car warehouses, garages and walls.
Usage:	• Can be applied directly onto the substrate • Substrate can alternatively be primed with GI 118, GI 115 or GI 115 Flex • Structure sealing adjustable by means of suitable thixotropic agents. Perform suitability test in advance.
Properties:	• Flexible • Medium mechanically resistance • High abrasion and scratch resistance • Usable in permanently wet areas
Substrate:	• Residual moisture: < 4 % cement-based substrates 0,5 % weight anhydride screed

Technical Data

Colour:	Approx. RAL 7032; more colours on request
Pack size:	15 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. 1.35 g/cm^3
Shore hardness A/D: **ISO 7619-1:2012**	87/40
Tensile strength: **EN ISO 527**	Approx. 2.8 N/mm^2
Elongation at break: **EN ISO 527**	Approx. 130 %
Solid parts	Approx. 100 %
Viscosity (25 °C, V03.4): **EN ISO 2884-1:2006**	Component A: 485 – 725 mPas Component B: 1050 - 1550 mPas
Mixing ratio:	2 : 1 (by weight) 1.51 : 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.

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Processing Data:

Material usage:	250 – 450 g/m² per layer Addition of 1 – 3% thixotropic agents for structure sealing 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):	10 – 15 minutes (30 °C) 20 – 30 minutes (20 °C) 30 – 40 minutes (10 °C)
Revision time (50 % air humidity):	Min. 6 – 8 hours, max. 12 hours at 30 °C Min. 12 – 16 hours, max. 24 hours at 20 °C Min. 24 – 36 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:	• 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. • For uneven substrates we advise levelling layer with GI 118, GI 115 or GI 115 Flex to ensure an even surface for the application.
Tools:	• Rubber slider, roller, paint grids
Mixing:	• 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:	• Apply with rubber slider and short or medium piled roller evenly in a cross shaped pattern with the help of paint grids. • In case of bigger areas care must be taken to work on in time in order to minimize overlapping traces and colour differences. • Within the revision time, the sealing can be applied directly onto the primer. • 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 by grinding after curing for the next layer.
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:

CE-label:	DIN EN 13813: 2002
Safe Handling:	The product is intended for professional use. Data sheet 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 10
Sustainability:	Biobased content: approx. 8 %
General:	• Colours with poor coverage (e.g. white, light gray, light yellow, light orange, etc.) may require a higher layer thickness or a multi-layer structure. • Depending on the type and strength of the point load, surface disturbances may occur, but these do not affect usability and are not a fault or deficit within the product. • Only work with same batch numbers to avoid colour differences. If this is not possible, available batches must be mixed to minimize this effect. • In case of bigger areas care must be taken to work on in time in order to minimize overlapping traces and colour differences. • Should heating be necessary for professional installation, do not use heat sources based on fossil fuels because they produce water vapour and carbon dioxide which disturbs the surface of the coating. • Pay attention to structural and on-site conditions such as joints, cracks, etc.

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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