



GI 233

Top Coat

- Scratch resistant
- Silk matt
- Pigmented
- Solvent-based

Product description:	GI 233 is solvent-based, coloured, high covering and silk matt hardening sealing and coating material based on acryl polyurethane resin for cement, reaction resin- and asphalt-bound substrates.
Usage area:	Inside and outside area: road markings, cycle paths, production and industrial halls, workshops, warehouses food plants and swimming pools.
Usage:	• Sealing for industrial and commercial use • Smooth coat, though through the addition of special filler an anti-slip coating according to the requirements of respective trade associations can be made.
Properties:	• Medium mechanically and chemically resistant • High abrasion and scratch resistance • Light stable and weatherproof • Tough-elastic • High opacity • Usable in constant wet areas • With a suitable structure, the system has a slight water vapour diffusion capability
Substrate:	• Priming mandatory: Dependent on the substrate GI 110, GI 115 or GI 118, for substrates of mastic-asphalt GI 210 or GI 215

Technical Data:

Colour:	RAL 7032; more colours on request
Package 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. 1.2 g/cm ³
Adhesive pull strength: EN 1542	> Concrete fracture
Solid parts:	Approx. 70 %
Viscosity (25 °C, V03.4): EN ISO 2884-1:2006	Component A: 1240 – 1860 mPas Component B: 45 – 65 mPas
Mixing ratio:	5 : 1 (By weight) 4.4 : 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, a number of brines, diluted acids, saline solutions, mineral oils, lubricants, fuels and many solvents (with some materials a change in colour is possible). We advise to do some testing yourself depending the intended use.

Processing data:

Material usage:	150 - 250 g/m ² (smooth substrates) per layer Minimum 500 g/m ² (on scattered substrates) 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)	20 – 25 minutes (30 °C) 35 – 40 minutes (20 °C) 55 – 70 minutes (10 °C)
Revision time (at 50 % air humidity)	Min. 6 - 8 hours, max. 12 hours at 30 °C Min. 8 - 12 hours, max. 24 hours at 20 °C Min. 16 - 24 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. • Sealing takes place on a prepared and primed substrate. • Within the revision time, the sealing can be applied directly onto the prepared and primed substrate. If the revision time is exceeded, the surface must be broadcasted with fire-dried Quartz-sand or, otherwise this area must be prepared by grinding after curing for the next layer.
Tools:	• Rubber slider, short or medium piled 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. • GI 233 is ready formulated and may not be diluted or filled.
Application:	
Smooth substrate:	• Apply with rubber slider and evenly spread with short or medium piled roller in a cross pattern. • In case of bigger areas care must be taken to work on in time in order to minimize overlapping traces and colour differences.
Rough substrate:	• The product is to be applied with the help of a paint-grid and a short- or medium piled roller. • 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 temperatures 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 underneath the ground. It is important to keep an eye on the venting 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. Leaflet M044, production and processing of Polyurethanes and isocyanate. 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:	PU 50

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.

GREMMLER BAUCHEMIE GMBH
LISE-MEITNER-STRASSE 5
46569 HÜNXE

PHONE: +49 (0)281 9440340
FAX: +49 (0)281 9440344
info@gremmler.de
www.gremmler.de