

# Crack resin

- Silicate resin based
- Silicon-free
- Low emission



| Product description: | GI 344 is a solvent-free, unfilled and non-pigmented dual-component reaction plastic         |  |
|----------------------|--|--|
|                      | based on silicate resin.   |  |
| Usage area:          | • Crack resin for areas where a short-term recoat ability of the surface is required         |  |
| Usage:               | Closing of joints and cracks in mineral screeds  |  |
|                      | <ul> <li>Bonding of e.g. repair angles and angle profiles</li> </ul>                         |  |
| Properties:          | Rapid curing   |  |
|                      | Silicon-free   |  |
|                      | <ul> <li>Usable on screeds under floor-heated areas (max. flow temperature 35 °C)</li> </ul> |  |
|                      | • Meets the requirements of emission class EC 1 PLUS according to GEV EMICODE                |  |
|                      | classification criteria (test report number ECO Institute: 53067-001-002).                   |  |
| Substrate:           | <ul> <li>Residual moisture: &lt; 4 % cement-based substrate (tested by CM)</li> </ul>        |  |
|                      | 0.5 mass % weight anhydride screed.  |  |

### **Technical Data**

| Colour:                              | Component A: transparent  |
|--------------------------------------|---|
|                                      | Component B: brownish   |
| Pack size:                           | 600 ml  |
|                                      | Box with 5 bottles of 300 ml component A and component B            |
|                                      | each including 2 bags of metal joint connectors at 20 pieces.       |
| Storage life:                        | From production date 12 months; store in original containers;       |
|                                      | dry, cool, frost free   |
| Density at 23°C / 50 % air humidity: | Component A: Approx. 1.45 g/cm <sup>3</sup>                         |
| EN ISO 2811-1:2011                   | Component B: Approx. 1.13 g/cm <sup>3</sup>                         |
| Solid parts                          | Approx. 100 %   |
| Consistency (23 °C):                 | Flowable for up to 12 minutes                                       |
| Mixing ratio:                        | 1 : 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:                            | Dependent on the crack width and depth                   |
|  | 1 mixture gives approx. 600 ml                           |
| Method of application:                     | Directly from the bottle                                 |
| Processing time (50 % air humidity):       | Approx. 10 – 12 minutes at 20 °C (temperature dependent) |
| Revision time (50 % air humidity):         | Approx. 20 – 30 minutes at 23 °C (temperature dependent) |
| Curing time (complete mechanical stress at | 3 days (30 °C)   |
| 50 % air humidity):                        | 7 days (20 °C)   |
|  | 10 days (10 °C)  |
| Processing temperature:                    | 10 – 30 °C   |

## Processing:

| Preparation of the substrate: | <ul> <li>Substrate must be dry, clean, rough, stable and free of separating substances like oil, fats etc.</li> <li>The cracks must be milled, cross-sections set and sucked out, and shaft connectors inserted into the cross-sections.</li> </ul> |
|-------------------------------|---|
| Tools:                        | Toothed blade   |
| Mixing:                       | • Hardener component needs to be poured into the bottle of the resin component. Then shake intensively for approx. 30 - 60 seconds.   |
|                               | Attention:  |
|                               | Before applying to the substrate make sure to have an even and smear-free mixture. When this is reached, it is not allowed to shake the product again.  |
|                               | This leads to segregation and disturb the Curing.   |
|                               | <ul> <li>The tip of the bottle needs to be cut to match the crack spike.</li> </ul>   |
| Application:                  |   |
| Closure of joints + cracks:   | • Directly after mixing the product is fluid and easy to use for small cracks.  |
|                               | • After 6 – 8 minutes (20 °C) the material starts getting thicker. In this form it is ideal for large cracks or for refilling the first layer of grout.   |
|                               | • After filling the joint wipe down the surface smoothly and sprinkle with fire-<br>dried Quartz sand.  |
| Gluing of sections and rails: | <ul> <li>Mix the grouting resin and wait until the viscosity increases (approx. 6 -8 minutes (20 °C). Then apply it to the substrate and immediately insert or assemble the parts to be bonded and press well.</li> </ul>                           |
|                               | • The bonded materials must be fixed during the setting process   |
|                               | <ul> <li>In order to ensure the adhesion of subsequent layers, it is mandatory to<br/>sprinkle the surface sufficiently.</li> </ul>   |



| Processing conditions: | • The material, air and ground temperature must be between 10 °C and 30 °C during the processing, installation and curing time.  |
|------------------------|--|
|                        | <ul> <li>The substrate temperature must be at least 3 °C above the dew point.</li> </ul>   |
|                        | • 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:

| 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 40  |
|                |  |

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.