



Silicate Resin - S1

Technical Data Sheet

Components	Density [g/cm ³] (t = 23±2 °C)	Properties	Pot life / Product feature
"A" component: Na-waterglass (M≈2)	1,59±3%	fast-setting, hard, high-strength, chemical resistant, abrasion resistant	~30 minutes, for summer use, Short-Liner (patch repair)
"B" component: isocyanate-containing blend	1,22±3%		

APPLICATION FIELDS OF THE PRIMELINER SILICATE RESIN PRODUCTS

The Primeliner Silicate Resin products are used for the repair of concrete structures. They are suitable for the repair of cracks, spalls, and other damage to concrete. The products are easy to apply and provide a durable, long-lasting repair. They are also resistant to water, chemicals, and abrasion.

Characteristics of the resin components	Characteristic value
Flammability class of the "A" component (Na-waterglass)	non-flammable
Flammability class of the "B" components	flammable
Enclosed space flash point of "B" components	> 170 °C
Open space flash point of "B" components	> 200 °C
Non-volatile content of the "A" component (Na-waterglass) at 105 °C	≤ 50 m/m%
Non-volatile content of the "B" component at 105 °C	≥ 80 m/m%





Essential characteristics of the hardened resin	Performance
Compressive strength	≥ 40 MPa
Flexural strength	≥ 20 MPa
Adhesion strength on C16 concrete surface	≥ 3,2 MPa (concrete failure)
Adhesion strength on non-glazed vitrified clay surface	≥ 1,5 MPa
Adhesion strength on hard PVC surface	≥ 1,5 MPa
Linear shrinkage	≤ 0,1%
Abrasion resistance (Taber-Abraser)	≤ 75 mg
Surface water uptake	≤ 24 g/m ² •day
Frost resistance* (25 frost-thaw cycles)	resistant
Thermal resistance* in wet and dry air (at +80 °C)	resistant
Water vapor diffusion resistance , 5 mm layer thickness	14•10 ⁷ – 18•10 ⁷ m ² •s•Pa/g
Water tightness (1 m water column, 24 hours)	watertight
Chemical resistance* tested for: communal waste water, 10% NaOH, 10% HCl, 10% H ₂ SO ₄ , saturated NaCl, 5% Na-hypochlorite, crude oil, vegetable oil. * The change of the tested properties may be maximum ±20% compared to the original condition.	resistant

MANUFACTURER'S DECLARATION

The performance of the resin lining and coating systems is valid if the following conditions are provided:

- The treated surface must be clean, and free of dust, oil, fat and loose particles.
- During proceeding, the material temperature shall be at least 5 °C, and the ambient temperature at least -5 °C.
- The instruction of the technical guidebook must be followed.
- The hardened resin coatings can be loaded in a temperature range between - 15° and +80° C.
- The hardened resin coatings do not produce emissions that are harmful for the health or for the environment.

