

NordicSIR Bond

Two Component (2C) High Bond Silicate Resin

Product Description:

A quick reacting, low foaming, expanding, two component injection silicate resin with high bond strength, suitable for:

- Consolidating loose material
- Stabilisation and protection against erosion
- Strengthening of construction structures (e.g. gabion walls)
- Strengthening of rock masses

Advantages:

- Rapid curing with high final hardness of the resin
- Excellent penetration depths due to initial viscosity levels
- Able to cope with dynamic loads
- Good adhesion strength of up to 4MPa.
- Optimal adhesion levels in both wet or dry conditions
- Acid and alkali resistant

Technical properties:

The data below are laboratory data only. They may vary in practice due to thermal exchange between resin and strata, surface properties of the stone, humidity, pressure and other factors.

Reaction Data:

Temperature	25 °C
Setting Time	6 to 7 min
Maximum reaction temperature	105°C
Foaming factor	1 – 1,5

Material Data:

	Component A	Component B
Density at 25 °C kg/m ³	1450 to 1480	1100 to 1140
Viscosity at 5 °C mPa*s	985 to 1000	930 to 950
Viscosity at 10 °C mPa*s	640 to 650	580 to 600
Viscosity at 15 °C mPa*s	428 to 435	400 to 410
Viscosity at 20 °C mPa*s	298 to 305	280 to 285
Viscosity at 25 °C mPa*s	220 to 225	200 to 205
Viscosity at 30 °C mPa*s	170 to 175	130 to 135
Flash Point°C	-	>100

Mechanical Data:

Compressive Strength (24Hours)	> 21 MPa
Compressive Strength (1 month)	> 27 MPa
E-Modulus	> 245 MPa
Shore D	> 50

Technical Composition and Properties:

Component A is a special sodium silicate with additives.

Component B is a modified isocyanate.

Application:

Before pumping stir both components thoroughly. The components are pumped by a dual component pump at the volumetric ratio 1:1. They are mixed thoroughly in a static mixer unit, prior to use. Product can be sprayed onto the target zone or injected into strata via a lance with an additional packer, when required.

Recommendation:

We recommend that, before use, the product should be stored for at least 12 hours at a minimum temperature of 15 °C to achieve the recommended mixing temperature of between 15 °C to 25 °C.

Packaging:

Component A: 35 kg in PE can

Component B: 30 kg in PE can

Storage, shelf life:

The shelf life of the product is six months from date of delivery. The product should be stored in a dry place at temperatures between 0 °C and 25 °C. Improper storage will shorten shelf life.

Disposal:

Dispose of uncured product components in accordance with the local regulations. Small quantities of cured product residues may be disposed of as normal domestic waste. Empty cans should be cleared of liquid by punching a hole through the edge of the cover and turning them upside down, until liquid does not flow out any longer.

Disclaimer:

The data in this sheet conform to our best knowledge and experience at the date of printing, which is indicated below. The state of knowledge and experience are evolving constantly. Please pay attention therefore, that you always refer to the current version of this data sheet. The description of the product application in this sheet cannot take the special conditions and circumstances into account emerging from the individual case. Application, use and processing of our product occur outside of our control capabilities. In particular, the processing results are exclusively subject to your own responsibility. No data in this sheet constitute a guarantee in a legal sense. Every time the user is obliged to check the product and auxiliary agents in terms of usefulness for his intended use.

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