

1- TECHNICAL DATA SHEET

Applications

BB-HRT 100 is an injection system that can be used for the injection of soils:

- The high obtained compressive strength makes it suitable for stabilizing soils, ensuring a compact, durable and strong substrate.
- Due to its extremely low viscosity (25mPas), it can be used to inject very dense soils
- The material is suited for the creation of horizontal and vertical waterproof barriers in soils
- Reaction with water ensures a deep penetration in the soil and will prevent a premature reaction

Properties

- BB-HRT 100 is a 1-component (+cat), polyurethane based injection system that needs water in order to react and reacts into a hard, hydrophobic grout.
- Good chemical resistance against many acids, bases, solvents, and fuels (check chemical resistance list)
- No shrinkage after curing
- Free expansion: up to 2 times
- Non-toxic: does not contain solvents.
- Non-flammable.
- Excellent adhesion on mineral building materials such as concrete, cement and brick.
- Variable reaction time by adjusting the BB-HRT 100 CAT.

Physical data

- Typical values:

BB-HRT 100 RESIN:

Color	Brown
Viscosity (20°C)	25 mPas
Density (20°C)	1,1 g/cm ³
Flash point	>148 °C
Storage temperature	Between 10 °C and 30 °C

BB-HRT 100 CAT:

Color	Yellow
Viscosity (20°C)	20 mPas
Density (20°C)	0,97 g/cm ³
Flash point	>148 °C
Storage temperature	Between 10 °C and 30 °C

BB-HRT 100 Mixture:

Color	Brown
Viscosity (20°C)	25 mPas
Density (20°C)	1,1 g/cm ³
Min. application temp	5 °C
Expansion Volume	Up to 2 times in volume
Compressive strength (after 6 weeks, reaction with quartz type H32)	12 MPa
Flexural strength (after 6 weeks, reaction with quartz type H32)	2 MPa

- Reaction times:

	0,5% CAT	1% CAT	2% CAT
20°C	Start: 9 min End: 11 min	Start: 5 min End: 6 min	Start: 2 min End: 3 min

BB-HRT 100 reacted with 10% water (PH 7).

Uses

1. Resin preparation

Create 1 mixture with the BB-HRT 100 RESIN and adequate quantity BB-HRT 100 CAT.

Depending on the ambient and structure temperature, the reaction times will vary. The higher the temperature, the quicker the reaction time.

Secondly the amount of water present in the structure will also influence the reaction time of the mixture. The reaction time of the mixture can be altered by changing the component BB-HRT 100 CAT. The more BB-HRT 100 CAT is added, the quicker the reaction time. We recommend a maximum of 10% BB-HRT 100 CAT to be added.

2. Substrate preparation

In order to guarantee a good injection by BB-HRT 100 a soil analyses needs to be performed.

Depending on the application purpose (waterproofing, stabilization,...), the correct injection technique needs to be applied. Please consult your BBL contact person for more information or the specific application manuals of the injection techniques.

3. Injection

The BB-HRT 100 mixture needs to be injected with a 1-component pump.

The selected injection pressure is as low as possible, start injecting and increase until you see the resin flowing. Injection with low pressure ensure a deeper penetration of the resin and complete sealing of the soil.

We highly recommend to consult your BBL contact person for more information or the specific application manuals of the injection techniques.

4. Cleaning

As long as the components are liquid, the pump can be cleaned with BBL PU CLEANER. Hence we recommend, every time there is a stop of more than 15 minutes, and at the end of the injection works to flush the pumps with BBL PU CLEANER, which is a cleaner with high flash point.

Hardened material needs to be cleaned with PU dissolver.

Packers can be removed, and the boreholes can be sealing with a fast-setting mortar.

For more details see application manual of the BB-HRT 100 .



Packaging

BB-HRT 100 RESIN:	20 kg plastic jerry can 225kg metal drums 1000 kg IBC
BB-HRT 100 CAT:	0,4 kg plastic bucket 20 kg plastic jerry can

Shelf Life

24 months after production date in the original, unopened and undamaged packaging, according to the storage instructions of each component (see technical data of this sheet). If the following recommendations are not followed, the shelf life of the material cannot be guaranteed.

Safety Recommendations

- Wear safety and protection materials when handling this material (glasses, gloves, protective clothing).
- In the event of contact with the eyes: rinse thoroughly with clean water and consult a doctor.
- In the event of skin contact: rinse with water thoroughly.
- Mix residues of the BB-HRT 100 with sand and dispose of in accordance with local regulations.
- The resin can react with water or atmospheric humidity to form CO₂ gas. This can build up pressure in a closed package or container that has already been opened.
- Consult the Material Data Safety Sheet for more information on health and safety regulations.