



TECHNICAL DATA SHEET

2-component, stabilizing and lifting polyurethane based injection system. Reacts into a high-strength, high-density, hydro-insensitive structural polyurethane foam with free rise density between 55 and 65 kg/m³ depending on techniques and temperatures.

Designed for soil stabilization, levelling and lifting of structures and cavity filling.

Applications

BB-HRT 2C 55 is an injection system that can be used for the injection of soils:

- The high obtained strength and density makes it suitable for stabilizing soils, ensuring a durable and strong substrate.
- Lifting and levelling the structures to the desired height without the need of excavation.
- Filling voids beneath concrete slabs and foundations.
- Sinkhole remediation.
- Void filling in rocks, mines and tanks.

Properties

- BB-HRT 2C 55 is a 2-component polyurethane-based injection system. Both components are mixed in a 1-to-1 volumetric ratio and react into an expandable foam with a free rise density between 55 and 65 kg/m³ depending on techniques and temperatures.
- Can be injected in moist and wet undergrounds without losing its capabilities.
- Good chemical resistance against many acids, bases, solvents, and fuels (check chemical resistance list)
- No shrinkage after curing.
- Non-toxic: does not contain solvents.
- "Traffic-ready" in 15 minutes at 20°C
- Closed cell.

Physical data

- Typical values:

BB-HRT 2C 55 Comp A:

Color	Yellow
Viscosity (20°C)	>205 <220 mPas
Density (20°C)	1,03 g/cm ³
Flash point	>148 °C
Storage temperature	Between 10 °C and 30 °C

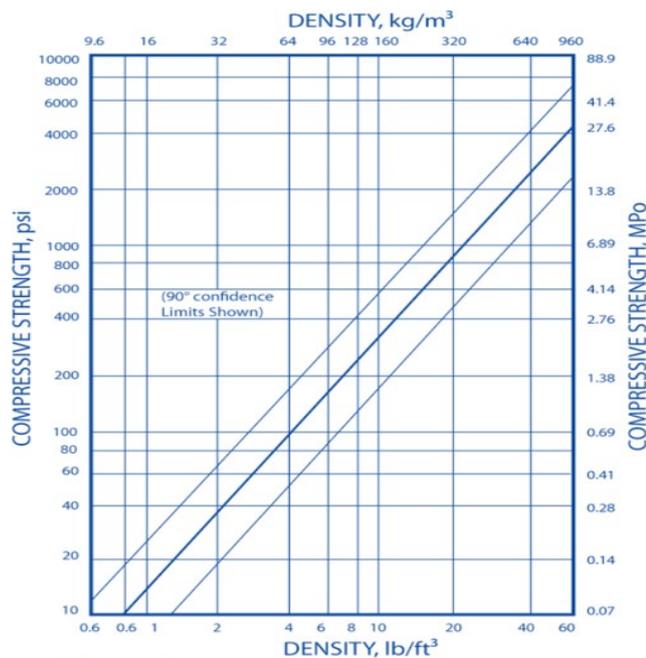
BB-HRT 2C 55 Comp B:

Color	brown
Viscosity (20°C)	>235 <245 mPas
Density (20°C)	1,23 g/cm ³
Flash point	>148 °C
Storage temperature	Between 10 °C and 30 °C

- Reaction times:

20°C	1-to-1 volume
	Start: 8-10 sec
	Gel time: 28-30 sec
	Tack free: 50-55 sec

- Density – Compressive strength graph:



Effect of Density on Compressive Strength



Uses

1. Resin preparation

The resins are supplied and packaged in a 1-to-1 volume ratio, ready-to-use.

2. Substrate preparation and analyses

In order to guarantee a good injection of the BB-HRT 2C 55 a soil analyses needs to be performed. Please consult your BBL contact person for more information or the specific application manuals of the injection techniques.

3. Injection

This resin system needs to be injected with a 2-component, heated reactor with spray gun. Resin will be injected in 1-to-1 volumetric ratio.

For specific working conditions, such as working temperatures, flow rates, working pressures and distribution points, we highly recommend consulting your BBL contact person for the specific site conditions and specific application.

4. Cleaning

As long as the components are liquid, the pump can be cleaned with BB-HRT PU CLEANER. Hence we recommend, at every interruption, and at the end of the injection works to flush the spray unit with BB-HRT PU CLEANER, which is a cleaner with high flash point.

Hardened material needs to be cleaned with PU dissolver.

For more details see application manual of the BB-HRT 2C 55.

Packaging

BB-HRT 2C 55 COMP A:	210 kg metal drum 1075 kg IBC
BB-HRT 2C 55 COMP B:	250 kg plastic bucket 1250 kg IBC



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 2C 55 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.