

## 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/m<sup>3</sup> depending on techniques and temperatures.**

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



### I. Applications

TEKINJECT PU 2C SOIL 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 of rocks, mines and tanks.

### II. Properties

- TEKINJECT PU 2C SOIL 55 is a 2-component polyurethane-based injection system. Both components are mixed in a 1-to-1 volumetric ration and react into an expandable foam with a free rise density between 30 and 40 kg/m<sup>3</sup> 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.

## III. Technical Data

- Typical values:

TEKINJECT PU 2C SOIL 55 Comp A:

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

TEKINJECT PU 2C SOIL 35 Comp B:

Color	brown
Viscosity (20°C)	235 - 245 mPa.s
Density (20°C)	1,23 g/cm <sup>3</sup>
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

## IV. Processing

### 1. Resin preparation

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

### 2. Substrate preparation and analyses

To guarantee a good injection of the TEKINJECT 2C SOIL 35 a soil analysis needs to be performed. Please consult your TEKINJECT 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 TEKINJECT contact person for the specific site conditions and specific application.

## 4. Cleaning

If the components are liquid, the pump can be cleaned with TEKINJECT PU CLEANER. Hence, we recommend, at every interruption, and at the end of the injection work to flush the spray unit with TEKINJECT PU CLEANER, which is a cleaner with high flash point.

Hardened material needs to be cleaned with PU dissolver.

For more details see the application manual of the TEKINJECT PU 2C SOIL 35.

## V. Packaging

TEKINJECT PU 2C SOIL 55 COMP A:	210 kg metal drum 1045 kg IBC
TEKINJECT PU 2C SOIL 55 COMP B:	250 kg plastic bucket 1250 kg IBC

## VI. 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.

## VII. Precautions and 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 TEKINJECT PU 2C SOIL 55 with sand and dispose of in accordance with local regulations.
- The resin can react with water or atmospheric humidity to form CO<sub>2</sub> 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.

## VIII. Company Details

TEKINJECT BV  
Kruisblok 6  
2320 Hoogstraten  
Belgium

[www.tekinject.com](http://www.tekinject.com)  
[info@tekinject.com](mailto:info@tekinject.com)