

Technical Instruction

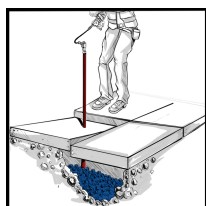
Two-Component Polyurethane Foam Injection System for Soil

GeoPolymer.55 is a two-component, closed-cell polyurethane foam system characterized by high density, mechanical strength, and water resistance. The foaming process is driven by carbon dioxide generated during the reaction between component A and component B.

Properties

- ❖ **Mixing ratio:** 1:1 by volume
- ❖ High mechanical strength
- ❖ Accelerated reaction time
- ❖ High foam density
- ❖ Excellent adhesion to various substrates
- ❖ No shrinkage after curing

Obszary stosowania



- ❖ Soil stabilization
- ❖ Leveling and lifting of structures
- ❖ Sealing of pipeline joints
- ❖ Void filling
- ❖ Sinkhole remediation

Product Technical Data

	Component A	Component B
Color	Straw	Brown
Viscosity (23 °C)	300 ± 50 mPas	200 ± 50 mPas
Density (23 °C)	1,06 ± 0,05 g/cm³	1,23 ± 0,05 g/cm³
Volumetric Mixing Ratio (A / B)	100 / 100	
Weight Mixing Ratio (A / B)	100 / 116	
Core Density	45 kg/m³	
Free Density	55 kg/m³	
Compressive Strength at 10% Strain	260 kPa	

The data presented above were obtained under laboratory conditions and are indicative. Conducting the foaming process under different conditions (especially with varying temperatures of components A and B) may result in characteristic times and final product densities that differ from the declared values.

Optional Additional Products

- ❖ **Hammpack® PI-Cleaner** – for cleaning injection pumps
- ❖ **2K / 3K Injection Pump** with a 1:1 mixing ratio
- ❖ **Hammpack® Injection Packers / Injection Lances**

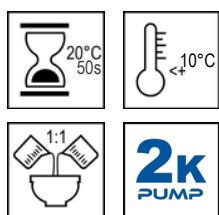
Preparatory Work for Injection

- ❖ This product is intended for professional users only.
- ❖ Before starting the injection process, an analysis of the condition of the structure must be conducted.
- ❖ The substrate must be stable and solid, free from loose elements or substances that reduce adhesion, such as grease, oils, etc.
- ❖ Drill holes properly, depending on the type of work being performed.
- ❖ Install injection packers / lances as required.

Resin Preparation

- ❖ Before application, both components should be at a temperature between **10°C and 30°C**.
- ❖ Higher temperatures accelerate the gel time, while lower temperatures slow down the process.

Processing Guidelines



Temperature:	20 °C
Start Time [s]:	9
Gel Time [s]: 55	55
Tack-Free Time [s]:	60

- ❖ Prepare the pump for application according to the manufacturer's instructions.
- ❖ The pressure at which the resin is injected depends on the structure and the desired outcome.

Cleaning After Work Completion

- ❖ Clean the pump and equipment using **Hammpack® PI-CLEANER**.
- ❖ Ensure appropriate safety measures are followed during cleaning.
- ❖ Once the cleaning agent exits the injection hose, flush it with the proper amount of **Hammpack® PI-SAVER** preservative.

Storage and Shelf Life

- ❖ Store in tightly sealed, original containers at temperatures between **10°C and 25°C**.
- ❖ Protect containers from moisture and direct sunlight.
- ❖ Shelf life under the above conditions is **6 months**.

Safety

- ❖ Wear protective goggles, gloves, and protective clothing. Avoid contact with skin and eyes.
- ❖ **In case of eye contact:** Rinse thoroughly with clean water and consult a doctor.
- ❖ **In case of skin contact:** Rinse generously with water.
- ❖ Additional information can be found in the product safety data sheet.

ResinBau GeoPolymer.55 is completely safe after the polymerization process is complete. When working with the material, always wear appropriate protective clothing, goggles, and gloves. It is important to avoid contact with skin and eyes, as well as inhaling vapors.

If the product comes into contact with skin or eyes, rinse immediately with clean water and seek medical advice. Do not eat, smoke, or work near open flames while using the product.

Before starting work, carefully read the safety instructions. Strictly follow industry regulations regarding reactive resins and chemical handling guidelines (MOO4/MO23).

Your safety is the priority – take care of yourself and your surroundings!