

PenePurFom 65



MATERIALS

(PenePurFoam 65)

DESCRIPTION Single component, intense, injectable low viscosity, polyurethane resin. When reacts with water, it forms a dense, waterproof, high density closed-cell foam to stop water leakage.

RECOMMENDED FOR Stopping water penetration from cracks in structures
 - Sealing dry cracks and joints up to 0,15 mm
 - Filling bug holes

ADVANTAGES - Volume expansion due to intense reaction with water
 - Hermetic sealing of difficult accessible areas
 - Accelerated polymerization with catalyst

PROPERTIES - Excellent seawater resistance
 - Solvent-free, halon-free
 - Resin reaction products are resistant to acids, alkalis, and microorganisms

SPECIFICATIONS

| Parameter name | PenePurFoa m65 | PenePurFoa m 65 catalyst | Test procedure |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------|---------------------------|
| Density, kg/m ³ | 1100 ± 50 | 950 ± 50 | GOST 18329 |
| Relative viscosity * at 20 ± 2 °C, mm ² /s | 200 ± 20 | 40 ± 10 | GOST 8420 |
| Pot life * of resin and catalyst mixture (when not in contact with water and air), 20±2 °C, min. | 60 (film formation on the surface upon 3-5 min. is acceptable) | | TS 5775-012-77919831-2013 |
| Resin volume expansion at 20±2 °C when in contact with water and catalyst, %, max | 6500 | | |

* - resin viscosity rises as the temperature decreases; in higher temperatures the pot life will be reduced

PACKAGING «PenePurFoam 65» – metallic can 20 kg
 «PenePurFoam 65 Catalyst» – metallic can 1 kg (2 pcs.).

TRANSPORTATION all types of transport.

SHELF LIFE 24 months when properly stored in a dry place at a temperature from 0 up to +50°C in unopened and undamaged original packaging.

Instructions for use PenePurFoam 65

Apply when the temperature of the structural surface is from 5°C up to 35°C.

Safety Precautions

Use PPE: chemical-resistant rubber gloves, cotton gloves, respirator, protective goggles, suitable protective clothing, rubber boots. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Surface Preparation

Flush clean water to joints, cracks using a pump or a high-pressure water jet.

Pump preparation

Use the manual pump "EK-100M". Before applying the resin, use hydraulic oil (e.g., Mobil HLP-68 or equivalent) in circulating mode for control flushing of the pump.

Injector installation

- Use ball valve type metal injection packers. Hole diameter should be 1-2 mm larger than the one of injector (for example, with an injector diameter of 10 mm, the hole diameter should be 11-12 mm).
- Drill injection holes with an angle of ~ 45° to the surface. The distance between the holes and from the edge of the crack, concrete joint should be ½ of the thickness of the structure
- Remove drilling residues from the holes using compressed air and install outermost injector
- For vertical surfaces and ceilings make a sawcut along the length of the crack at a width of approximately 25 × 25 mm and fill it with the mortar mixture "Screpa M500. For repair work"

Resin preparation

- Warning!** Minimum temperature - +17°C. Viscosity rises as the temperature decreases. In higher temperatures the pot life will be reduced.
- Calculate catalyst amount based on water filtration rate and ambient temperature (see table below)
 - Make control batch to assess on-site pot life
 - Prepare resin in the amount adequate to pot life: mix resin with catalyst for 3 minutes manually or using low speed drill (up to 300 RPM).

| Catalyst amount, % | Reaction time when in contact with water, depending on temperature | | |
|-----------------------|-----------------------------------------------------------------------|---------|-------|
| | +5°C | +15°C | +25°C |
| 2 | 10 min | 9 min | 6 min |
| 6 | 4 min | 3 min | 2 min |
| 10 | 2 min | 1,5 min | 1 min |

Injection

- Warning! For vertical surfaces, always inject from bottom to top (from the lowest injection packer).
- Pump until resin starts to flow from the next highest injection packer or until the pressure rises.
 - Begin filling from the next injection packer and follow this sequence of injection
 - If viscosity increases, rinse the pump with a solvent (for example, solvent 646 GOST 18188), and prepare a new mixture
 - Ensure that all injection packers are filled with the resin before polymerization
 - Use "Penecrete" mortar mix if injection packers need to be loosened and removed.

Pump cleaning

Flush the pump and hoses with solvent (for example, xylene or GOST 18188 solvent 646) and hydraulic oil (for example, Mobil HLP-68 or equivalent). Remove cured resin mechanically.