

Technical Data Sheet

Epox-5117

(Epoxy resin to repair cracks in concrete walls and bridges)

Product description

This is a semi-diluted two-component epoxy resin product with high strength and impact resistance, adhesion, flexibility and resistance to repeated shocks, which makes this product to repair cracks in concrete walls and stairs. To take Injection is used in cracks.

Product properties

Low viscosity and permeable to the surface

Can be baked at room temperature

Resistance to moisture, water and chemicals

Excellent adhesion

High impact resistance

High strength

Flexible

Instructions

- The strength and durability of this adhesive depends on how to prepare the substrate and the correct mixing to apply the adhesive on it.

- For the least possible preparation, the desired surface should be cleaned of any dust, oil and grease.

Use cleaners such as acetone to clean greasy surfaces.

-After cleaning the surface, injection ports are installed on the surface. Before the injection process begins, a temporary sealing epoxy paste is applied to the crack surface between and around the ports.

Crack injection concrete repair can be completed using air rifles, manual delivery systems, spring or balloon capsules or electric injection pumps, or single-component or two-component air pumps. For stable operation in large or critical projects, the use of a two-component pump with positive displacement



and measurement is recommended. After calibration, the epoxy material is measured by a pump and mixed in a relatively suitable static mixer just before entering the crack.

Surface injection ports are sufficient to inject more cracks. Where the crack surface is blocked or crack width (3 mm) or larger, the plastic pipe ports are inserted directly into the openings or sealed in the holes drilled to cut the cracks. Injection ports are usually installed at a distance equal to or greater than the measured crack depth.

Mixing procedure

Measure at 3 volumes of part A and 1 volumes of part B

Product specification

	Resin	hardener
Appearance	clear liquid	clear liquid
Mixed viscosity at 25 c	400-600 cps.	
Specific gravity	1.1	
Mixing ratio by wight	3	1
Pot life at 25 c (100gr)	30 min	

Cure time

48 hours at 5 c

36 hours at 15 c

24 hours at 25 c

12 hours at 30 c



Tack-free time(thin film initial cure)

- 6 hours at 15 c
- 4 hours at 25 c
- 2 hours at 35 c

Typical Physical Properties

Property	value	test method
tensile strength	40 mpa	ASTM D638
tensile shear strength steel/steel	13 mpa	ASTM D1002
compressive strength	100 mpa	ASTM D695
flexural strength	40 mpa	ASTM D790
New to old concrete bonding	Slant shear test 36 mpa	-

Equipment maintenance

All tools should be cleaned with hot soapy water before the adhesive residue dries. Removing cooked debris is a difficult and time consuming operation. If solvents such as acetone are used for cleaning, staff should take appropriate precautions and, in addition, avoid skin and eye contact.

health and safety

The adhesive should be stored in closed containers at a temperature of 25 degrees.

After using the material, close the lid of the remaining material tightly.

Before using the material on the surface, make sure that there is no dust, damp or moisture on the surface.

Before using the material, clean the surface from any grease and dirt.

Wear industrial gloves and a mask when using materials.