

PC Bond LV



Low viscosity high modulus epoxy adhesive

Product Overview

PC Bond LV is a two component low Viscosity epoxy resin based crack injection resin system long mixed pot life designed for general bonding applications, sealing cracks in concrete and restoring its structural rigidity.

Areas of applications

1. Bonding of concrete, masonry and wood
2. Injection resin for cracked, structural Substrates
3. Gravity feed cracks in concrete slabs
4. Anchoring/grouting bolts, dowels, or pins.
5. Unfilled voids behind tiles or stone facades
6. Can be used as a repair mortar when mixed with dry silica sand.
7. Bonding of steel plates to concrete.
8. Rapid structural repair of concrete.

Properties

1. PC Bond LV adheres to the concrete exceptionally. It has impeccable bond Strength.
2. Due to its low viscosity it penetrates up to 12 mm.
3. It is solvent free and has zero VOCs.
4. It is suitable for high ambient temperature Environments.
5. It even cures hard at low temperatures.

Guidelines for Usage

1. Surface Preparation: the surface must be structurally sound, free from oil, dirt, grease, paints, coatings and other contaminants. Surface laitance must be removed by abrasives blasting, degreasing or by other mechanical means as per ICRI guidelines. In case of steels all oils, dust, grease, old coatings, and other chemicals surface contaminants and laitance must be removed. The surface should be sandblasted to a near white metal finish.

2. Mixing: Premix Part A (Resin) and B (Hardener) with a slow speed motor. Pour 2.3 parts by volume of Part A (Resin) and 1 part by volume of Part B (Hardener) into a clean, dry container and mechanically mix slowly for 5 to 7 minutes. Scrape the sides and bottom of mixing container while mixing. Do not whip or aerate while mixing. While preparing mortar, gradually add clean, dry 20/40 mesh silica sand to mixed epoxy. Blend thoroughly. The mix ratio of aggregate to binder is approximately 3:1 by volume, but may vary depending upon the desired consistency of the mortar.

3. Application: Application and surface temperatures should be at least 20°C and rising. PC Bond LV can be used neat or with an aggregate to anchor horizontal bolts. The anchor bolt hole should be free from all debris before grouting. Depth of embedment is typically 10 to 15 times bolt diameter. For vertical and overhead repairs apply PC Bond LV neat as a prime coat to the prepared concrete surface. Mix PC Bond LV into an epoxy mortar and apply to the area by trowel or spatula in lifts of 1" to 1½" (25 to 40 mm) prior to the primer coat to become tack free. Allow each lift to set before applying subsequent lifts. For vertical cracks attach injection ports and seal the face of the crack

with PC Bond LV. Allow it to sufficiently harden before injecting. Again pump PC Bond LV into the crack with two-component pressure injection equipment; starting at the bottom of the crack and working up. Work from port to port and cap off ports as you proceed up the crack to contain the PC Bond LV within the crack. DO NOT INJECT if water is leaking from the crack. Consult Pinjala Chemical's Technical Service Department regarding the use of the PC Bond LV products for leaking cracks. For horizontal cracks, open cracks by mechanical means and ensure that the prepared crack is free of all debris and standing water. Pressure injection technique is the same as for vertical cracks. If gravity feeding, pump PC Bond LV until cracks are completely filled. If working on an elevated slab, ensure the bottom of the slab is sealed prior to injecting or gravity feeding the crack so the epoxy doesn't leak through.

Dosage and Measures

1. The mix ratio of Part A (Resin) and Part B (Hardener) of PC Bond LV is **2.3:1**

Packages available

5 kg containers. Out of which Part A (Resin) is available as 3.5 kg container and Part B (Hardener) is available in 1.5 kg container

Storage and Shelf life

PC Bond LV should be stored in form of dry, undamped, unopened, undamaged, away from sunlight with original packaging, at a minimum temperature of 20°C. Its shelf life is 12 months when stored under proper conditions.

Safety Measures

1. Tools used for the application should be cleaned with acetone as long as the product is wet.
2. Appropriate safety and health precautions are advised (e.g. wearing safety rubber hand gloves, safety shoes and goggles, avoiding contact with skin and eyes, etc.).

Technical data

| | Part A | Part B | Mixed |
|---|---|--------|-------------|
| Appearance | Clear | Amber | Pale Yellow |
| Specific gravity | 1.1 kg/L | | |
| Mixed Viscosity | 335 cp | | |
| Gel Time (minutes) ASTM C 881 | 50 | | |
| Tensile Strength, psi (MPa) ASTM D 638 | 7,977 (55) | | |
| Tensile Elongation, % ASTM D 638 | 1.57 | | |
| Compressive Strength, psi (MPa) ASTM D 695 | 7 days: 12,183 (84) | | |
| Compressive Modulus, psi (MPa) ASTM C 695 | 7 days: 4.3×10^5 (2,960) | | |
| Bond Strength, psi (MPa) ASTM C 882 | 2 days: 1,958 (13.4) 14 days: 2,132 (14.7) | | |
| Heat Deflection Temperature ASTM D 648 | 50°C | | |
| Water Absorption @ 24 hours, % ASTM D 570 | < 0.2 | | |

For further clarifications Please contact on below address

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