



Technical Data Sheet

Ecohard EPLV

Low viscosity epoxy injection resin system

Description

Ecohard EPLV is two components, solvent-free, low viscosity epoxy resin system when mixed in the proportions supplied forms a strong permanent bond and seal cracks in concrete and masonry.

Ecohard EPLV is smooth flowing epoxy injection resin designed to be injected into crack widths from 0.2mm to 10mm.

Applications

Ecohard EPLV is used for injecting into static cracks in concrete or masonry, to form a permanent bond or seal.

Advantages

- Excellent bond strength to concrete, brickwork, and masonry
- Low viscosity epoxy resin to allow easy penetration
- Solvent free, non-shrink
- Resistant to wide range of chemicals

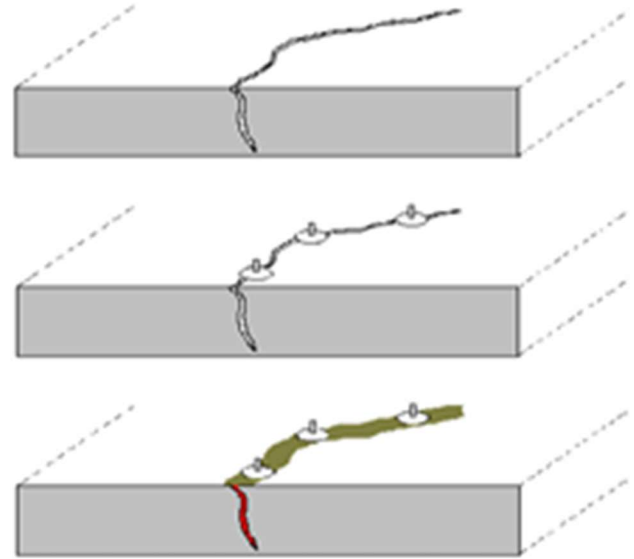
Technical properties

Solid content:	100%
Pot life:	50 minutes @ 20°C
Specific gravity:	1.06 ± 0.03
Viscosity:	≤ 6 poise @ 25°C
	≤ 3 poise @ 35°C
Min. application Temp.:	5°C

Method of use

Depending on crack width, depth, location, and thickness of the structural element that needs to be injected, many injection techniques requiring different injection tools and equipment's may be used.

The following method of injection is based on most common situation. For more details, consult **Envirocon technical department**.



Application

Surface preparation

Clean the surface and remove any dust, unsound or contaminated material, plaster, oil, paint, grease, corrosion deposits or algae. The surface should preferably be prepared using high pressure water jetting or light abrasive blasting, followed by thorough washing to remove dust and remaining particles. Dirt alone may be removed with wire brushes or similar mechanical means. Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser. The effectiveness of decontamination should be assessed by a pull-off test.

Blow the cracks and treated surface with oil free air to ensure complete removal of all dust and loose particles. Ensure that the surfaces are blown dry.

Prepare the substrate by blast cleaning or mechanically by grinding etc., then clean by brush and vacuum.

Disclaimer:

We hope that the information herein will be helpful. The data is based upon knowledge considered to be accurate and true and is offered for the user consideration, investigation and verification in the application intended. We do not warrant the results or performance attained due to the nature of the influence of other constituent components in the application.



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Fixing of injection nipples

Mix a small quantity of epoxy adhesive **Ecohard EPFC** then apply it in 2 – 3mm thick layer to the back and sides of each nipple's flange. Avoid blocking the drilled holes with adhesive.

Place each nipple centrally over the drilled hole using a locating rod. The spacing between nipples depends on the depth and width of the cracks. If the depth of the cracks is known, the nipples should be spaced at intervals equal to crack depth.

This is normally between 75 – 300mm.

This will allow the injection resin to spread from the injection point in a semicircular pattern and will therefore leak from adjacent nipples, at the same time as it reaches the base of the cracks.

Seal the surface of the crack between the nipples with **Ecohard EPFC**, 20 – 30mm wide 2 – 3mm thick. Injection process can commence after 2 hours from applying **Ecohard EPFC**.

In case the crack extends on both sides, nipples should be fixed to the other face of concrete element and placed at midway points relative to those at the front.

Injection

- Thoroughly mix the two components of **Ecohard EPLV** until uniform color is achieved. Adequate injection equipment capable of building a pressure up to 4 bars should be used.
- Pour the mixed resins into the injection equipment and start the lowest point. Injection should continue until mixed resins appears and leaks out the nipple above.
- Close the injected nipple and continue the injection process in the nipple above. This process should be repeated until all nipples are injected.
- Allow to cure overnight, remove the nipples and make good with **Ecohard EPFC**.
- Ground off or softened **Ecohard EPFC** with a blow lamp and peeled off

Yield

Has to be estimated by the engineer or operator and depends on width and depth of the cracks and voids.

Storage

12 months when stored properly in unopened original containers in dry conditions at temperature between 10 - 25°C.

Once the packaging has been opened, the useful life of the material is greatly reduced and it should be used as soon as possible

Cleaning

Used materials should be removed from tools, equipment and mixers with Envirocon Solvent immediately after use. Hardened material can only be removed mechanically.

Packaging

Ecohard EPLV is available in 4.5 liters/Kit

Cautions

Health and safety

Avoid skin and eye contact by wearing overalls, gloves, goggles, and air-mask etc. Spillage on skin should immediately be removed by thorough washing with water and soap or suitable cleaner. Eye should be flushed with fresh water.

Avoid inhalation of vapors and paint mist by wearing suitable air-mask. In the event of ingestion and eye contact, seek medical attention immediately. Painting must be carried out in well-ventilated area.

Smoking in the area should not be permitted. Local safety regulations should be followed.

Fire

Ecohard EPLV is non-flammable.

E n v i r o c o n C o n s t r u c t i o n P r o d u c t s L L C



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