



HYDROBOND LVI

Low Viscosity Crack Injection Epoxy Resin

Product Description

Dubond's Hydro Bond LVI, is two part, solvent free, low viscosity injection-liquid, based on high strength epoxy resin.

Uses

As an resin with good adhesion to dry concrete, mortar, stone, steel and wood. Hydro Bond LVI is used to fill & seal voids and crack in structures such as bridges & other civil engineering buildings, industrial & residential buildings, e.g. columns, beams, foundations, walls, floors and water retaining structures.

Advantages

- Solvent-free.
- Suitable for both, dry and damp conditions.
- Usable at low temperatures.
- Shrinkage free hardening.
- High mechanical and adhesive strengths.
- Hard but not brittle.
- Low Viscosity.
- Injectable with single component pumps.



Product Data

Form	Details
Colours	Part A : Colourless
	Part B : Brownish Yellow
	Part A + B Mixed: Yellowish-Brownish
Packaging	3 Kg & 9 Kg, (Comp A+B)
	Part A : 2 Kg
	Part B : 1 Kg

Technical Data

Chemical Base	Epoxy Resin
Mixed Density	1.14 Kg / L (at +27°C)
Viscosity	~250 Mpa at 30°C

Compressive Strength

According to FIP 5:12 and IS 9162-1979

Cutting Time	+30 °C
1 Day	~ 40 N / mm ²
7 Days	~55 N / mm ²
14 Days	~55 N / mm ²

Tensile Strength

According to ISO 527

Tensile Strength	~34 N / mm ² (after 14 days at +30°C)
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Bond Strength

According to ASTM C 882

Bond Strength	To concrete : > 10 N / mm ² (failure in concrete) After 14 days at +30°C
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System Information

Application Details

- Consumption / Yield : 1.14 kg of Hydro Bond LVI is ~ equal to 1 L injection resin.
- Substrate Preparation : Requirements :
Sound, clean, free from oil and grease and surface treatments etc.
Pre-treatment for good bond :
Concrete, mortar, stone should be thoroughly prepared by high pressure water jetting or mechanical means such as grinding, chiselling etc. Cracks must be cleaned to remove dust with compressed air.

Application Conditions / Limitations

- Substrate Preparation : +10°C min. / + 40°C max.
- Substrate Moisture Content : Dry Condition

Application Instructions

- Mixing : Part A : Part B = 2:1 (by weight)
- Mixing Time : Pre-Batched Packaging :
Add all of Part B to Part A. Mix with an electric mixer at slow speed (max. 250 rpm) for at least 3 minutes. Avoid entraining air.
Bulk Packaging :
Add both parts in the correct proportion into a suitable clean, dry container and mix in the same way as for the prebatched units.

Application Method / Tools

Successful application depends on very careful preparation. The surface to be treated must be structurally sound, free from standing water, oil, grease, surface contaminants. Dirt, dust and other foreign materials must be removed. Concrete which is fully contaminated with oil / grease, must be removed to the depth of sound & uncontaminated concrete.

Impregnation of cracks on Horizontal slabs :

Impregnation is applied with a paint brush or roller until complete saturation of the substrate is achieved. Cracks are sealed by pouring mixed Dubond's Epoxy Mortar or product like Micro Concrete.

Injection of cracks on Horizontal / Vertical slabs :

Injection flange / nipples are fixed along the crack line at an approximately 25 cm center-to-center distance with Dubond's Epoxy Mortar. Crack mouth should be opened and sealed with Dubond's Epoxy Mortar. Crack penetrating slabs to their soffit should also be sealed on the underside with Dubond's Epoxy Mortar or a suitable cementitious products like Micro Concrete. Mixed Hydro Bond LVI can be injected under pressure through injection ports using injection pump, such as Aliva AL-1200, AL-1250 or the Dubond Hand Pump. As soon as injection resin oozes out of the next injection port, the first one is sealed and injection process is continued from next port.

For horizontal crack, injection should start from any of the ends and to be continued and completed till the last port is used. For vertical crack, injection should start from the lowest port and continued upwards.

After completion of the injection process, the injection ports as well as the sealing materials between the ports are removed.

Cleaning of Tool

Clean all tools and application equipment with Epoxy Tinner immediately after use. Hardened / cured material can only be mechanically removed.

Potlife

100 g mass

According to FIP 5:1

Temperature	Time
+30°C	~15 min

Storage Conditions/Shelf Life

12 months from date of production if stored properly in unopened, undamaged and sealed original packaging, in dry conditions at temperatures between +5 C and +40 C

Notes on Application / Limitations

Maximum width of cracks to be injected : 5 mm

Hydro Bond LVI is suitable for dry condition.

Value Base

All technical data stated in this product data sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Health & Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.



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