

High strength, Low viscous epoxy injection grout

Uses

Conbextra EP10 LV is developed as a high ultimate strength and low viscous injectable epoxy resinous grout to fill cracks, honeycombs and cavities of high strength concrete structures.

- Low viscosity - can be injected into cracks and honeycombs of high strength structural members having high density.
- High mechanical strength - Performs even under heavy loads and stresses.
- Excellent adhesive strength - Good bonding with substrate
- Two part system - Easy to mix and handle
- Non shrink - Complete filling of voids and cracks
- Chemical resistant - Can be used in aggressive environments.

Description

Conbextra EP10 LV is a two part system comprising of liquid base and hardener. It is designed for injecting into cracks, honeycombs and construction joints ranging from 0.25mm to 9mm.

Technical support

Fosroc offers a comprehensive range of high performance, high quality concrete repair and construction products. In addition, Fosroc offers technical support service to specifiers, end-users and contractors, as well as on-site technical assistance in locations all over the country.

Properties

The following results are typical for the hardened grout at 30°C.

Density (kg/m ³)	: approx. 1050		
Compressive strength (N/mm ²)	1D	3D	7D
BS 6319 Part 2	40	65	80
Tensile strength (N/mm ²)			
BS 6319 Part 7 (7 days)	-	-	11
Fluxural strength (N/mm ²)			
BS6319 part 3 (7 days)	-	-	29
Pot life :	50 minutes @ 27°C		

Chemical resistance

Conbextra EP10 LV is resistant to oil, grease, fats, most chemicals, mild acids and alkalis, fresh and sea water. Fosroc shall be contacted when exposure to solvent or concentrated chemicals is anticipated.

Exotherm

All epoxy products will develop a temperature rise on mixing. Its extent will be a function of the volume to surface ratio, the ambient temperature as well as the mass and thermal conductivity of the surrounding materials. Fosroc shall be contacted for specific data.

Performance specification

All epoxy injection must be carried out with a two component low viscous epoxy resin system. The epoxy resin shall have sufficiently low viscosity of maximum 2Poise @ 300C to ensure easy injection into cracks and voids. The epoxy injection grout shall develop a compressive strength of 80 N/mm², tensile strength of 11 N/mm² and flexural strength of 29N/mm² @ 7days

Application instructions

Surface preparation

The area to be injected shall be cleaned to remove all loose material, laitence, grease and other deposits.

Drilling injection holes

Injection holes of 8 - 10mm dia shall be drilled at fixed intervals along the crack length or in a grid pattern incase of grouting of voids in concrete.

The holes shall be cleaned to remove all dust and loose material by blowing compressed air

Fixing nipples

Suitable injection nipples of GI/PVC shall be fixed in these holes using an epoxy sealing putty . The cracks shall also be sealed with this product.

The two components of Conbextra EP10 LV injection grout shall be individually stirred and then mixed and injected into the nipples through a suitable injection pump exerting a uniform pressure. Injection shall be carried out till it flows from the adjacent nipple and then stopped. The same operation shall be carried out for the next nipple.

After all the holes are completed, the nipples are removed next day and the holes shall be sealed with a high strength mortar

Cleaning

All tools and equipment should be cleaned immediately after use with Nitofl or Sol. Spillages should be absorbed with sand or sawdust and disposed in accordance with local regulations.

Estimating

Supply

Conbextra EP10 LV : 1 Litre pack

Storage

The storage, handling and placement of the grout must be in strict accordance with the manufacturer's instructions.

Shelf life

12 months in unopened container under normal warehouse condition below 35°C.

Precautions

Health and Safety instructions

Conbextra EP10 LV contains resins which may cause sensitisation when comes in contact with skin. Contact with skin and eyes and inhalation of vapour shall be avoided. Use of suitable protective clothing, gloves and eye/face protection is recommended. Barrier creams provide additional skin protection. Should accidental skin contact occur, it shall be removed immediately with a resin removing cream, followed by soap and water. Solvent should not be used. Incase of contact with eyes, immediate rinsing with plenty of clean water is suggested and medical attention shall be sought immediately - Vomiting should not be induced.

Fire

Nitoflor Sol is flammable. In the event of fire, use of fire extinguishers like Carbon dioxide or foam is suggested.

Flash point : 33°C

Additional information

The Fosroc range of associated products includes high strength cementitious epoxy grout, polyester resin based mortar for rapid presetting of steel shims to level or for direct bedding of small base plates. Resin Anchoring systems for same day anchoring of bolts in drilled holes in concrete or rock. Also available a range of products for use in construction; viz., admixtures, curing compounds, mould release agents, flooring systems and repair mortars. Separate datasheets are available on these products.