

Low viscous epoxy injection resin grout

Uses

Nitofill EPLV is used for injecting into cracks, honeycombs and cavities in concrete structures. It can also be used for grouting base plates with very narrow gaps (<10mm).

Advantages

- Low viscosity - Can be injected into fine cavities and narrow gaps.
- 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

Nitofill EPLV is a two part system comprising of liquid base and hardener. It is designed for injecting into narrow gaps, cracks and voids 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) | 1100 | | |
| Compressive strength (N/mm ²) | 1D | 3D | 7D |
| BS 6319 Part 2 | 45 | 60 | 70 |
| Tensile strength (N/mm ²) | | | |
| BS 6319 Part 7 (7 days) | 18 | | |
| Flexural strength (N/mm ²) | | | |
| BS 6319 Part 4 (7 days) | 55 | | |
| Pot life | 60 minutes @ 20°C | | |
| | 30 minutes @ 30°C | | |

Chemical resistance

Nitofill EPLV 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.

Specification clauses

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 (150-300 cps) to ensure easy injection into cracks and voids. The epoxy injection grout shall develop a compressive strength exceeding 60 N/mm² @ 7days, tensile strength exceeding 15 N/mm² and flexural strength exceeding 50N/mm². The mixed epoxy shall have a pot life exceeding 30 minutes @ 30°C.

Supplier specification

All epoxy injection must be carried out using Nitofill EPLV manufactured by Fosroc and used in accordance with the manufacturer's datasheet.

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

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.

Injection of resin

The two components of Nitofill EPLV 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.

Nitofill EPLV

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

Note : For grouting under base plates with very narrow gaps, either injection grouting or normal grouting by pouring, can be resorted to. For details, Fosroc shall be contacted.

Cleaning

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

Estimating

Packaging

Nitofill EPLV : 1 Litre pack

Storage

Shelf life

12 months in unopened container under normal warehouse condition.

Precautions

Health and Safety instructions

Nitofill EPLV 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. In case 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.

Important note :

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.



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