

Thixotropic epoxy adhesive

Uses

Bonding segmented concrete bridges / structures to speed up construction and provide a structural and water resistant joint. Can be used for pointing Stone masonry joints to retain structural integrity .

Advantages

- Excellent squeezability
- High bond strength
- Fast cure
- Tolerant to damp surfaces
- Wide range of temperature applications

Standards compliance

Nitobond PC fully conforms to meets the FIP specifications.

Description

Nitobond PC thixotropic epoxy adhesive is a 2 pack solvent free epoxy resin system consisting of a off white base and black hardener in preweighed quantities for easy onsite mixing. The product is available in three grades :

- Nitobond PC20 - Fast set for application between 5°C to 20°C
- Nitobond PC 30 - Medium Fast set for application between 15°C to 30°C
- Nitobond PC40 - Slow set for application between 25°C to 40°C

Technical Support

Fosroc provides a technical advisory service supported by a team of specialists in the field.

Properties

Colour	Base	- Off White	
	Hardener	- Black	
	Mixed	- Grey	
Specific gravity at 30°C		1.85 ± 0.05	
Cure characteristics			
	Recommended Application Temperature	Pot life ** (Mins.)	Open Time (Mins.)
Nitobond PC20	5°C-20°C	30 at 20°C	60 at 20°C
Nitobond PC30	15°C-30°C	30 at 30°C	60 at 30°C
Nitobond PC40	25°C-40°C	30 at 40°C	60 at 40°C
** for 100 g of mixed material			

Mechanical properties

Squeezability (FIP 5.4)	> 3000 mm ²	
Compressive Strength (FIP 5.6)	@ 24 hours	≥ 60N/mm ²
	@ 7days	≥ 75N/mm ²
Tensile bending strength (FIP 5.14)	Concrete failure	
Shear Strength (FIP 5.15)	≥ 12N/mm ²	

Application instructions

Surface Preparation

Concrete should be mechanically sound and free from contamination, such as free water, mould, oil or grease, laitence and dust. Grit blasting is recommended. Sections to be bonded should be checked for good alignment. A 'dry run' before the first application of the adhesive is recommended to ensure correct timing.

Mixing

The base and hardener into a suitable container shall be emptied and mixed with a paddle and slow speed heavy duty drill, ensuring the sides are scraped down. A uniform grey colour should be obtained after mixing thoroughly.

Application

The mixed adhesive is applied to both surfaces to be bonded with a serrated trowel or other suitable spreader.

The joint should be closed immediately, if this is not achieved the surface of the adhesive should be slightly scratched immediately prior to closing the joint to expose fresh adhesive. The joint must be closed within the open time of the adhesive. On site monitoring of the operation using lapped asbestos cement panels is recommended.

Cleaning of Application Equipment

Tools and equipment should be cleaned immediately after use with Nitoflor Sol.

Estimating

Packaging

6 Kg standard packs.

Coverage

Approximately 1.63m²/pack at 2 mm thickness

Nitobond PC

Storage

Shelf Life

12 months if stored below 35°C in unopened containers.

Precautions

Health and Safety

Some people are sensitive to epoxy resin system and may develop dermatitis. Direct contact with eyes will cause irritation and may cause serious damage if left untreated. Any eye contamination should be washed thoroughly with water and immediate medical attention should be sought. Gloves, barrier creams and eye protection should always be used when handling Nitobond PC and Nitoflor Sol.

If contact with skin occurs, a resin removing cream should be used, followed by washing with soap and water. Solvent shall not be used.

Fire

Nitobond PC base and hardener are nonflammable. Nitoflor Sol is flammable. Do not use near naked flames. No smoking.

Flash Points :

Nitobond PC (Abel open cup)	Base	100°C
Nitobond PC (Abel open cup)	Hardener	100°C
Nitoflor Sol (Abel closed cup method IP 33)	Solvent	33°C

Additional information

Nitobond PC is a part of wide range of adhesives, repair materials, sealing and waterproofing compounds, grouts and flooring products manufactured by Fosroc for the construction industry.

Separate datasheet is available on these products.