

Fosroc Nitobond SBA



constructive solutions

Epoxy adhesive for segmental bridge bonding

Uses

Nitobond SBA is used for bonding precast concrete bridge segments to provide a structural and waterproof joint. Nitobond SBA is also suitable as a gap filling paste and for grouting of starter bars, holding down bolts, etc, where a paste consistency material is required.

Advantages

- Excellent adhesion to concrete, steel and most construction materials
- High strength
- Moisture tolerant, can be applied to damp surfaces, free from standing water
- Easy to apply, non-sag at recommended application thickness
- Overlapping temperature grades to suit varying environmental conditions
- Long Pot Life and Open Time to minimize wastage

Standards Compliance

Complies to Federation of International Prestressing (FIP) Standard for Epoxy Bonding Agents for Segmental Construction

Description

A two component, solvent free epoxy resin system consisting of base resin and black hardener in pre-measured quantities for easy on-site mixing. Nitobond SBA has been especially formulated to meet the requirements for bonding prefabricated concrete bridge segments.

Basic Properties

Color :

| | |
|---------------------------------|-----------------------|
| Mixed material | : Grey |
| Specific gravity (mixed) | : 1.80 +/- 0.1 |
| Consistency | : Soft, non-sag paste |

Grades

| | |
|--------------|-----------|
| Nitobond SBA | : 10 - 30 |
| Nitobond SBA | : 25 - 40 |
| Nitobond SBA | : 30 - 55 |

Application Instructions

The appropriate grade of Nitobond SBA should be selected according to the expected ambient application temperature.

Surface Preparation

It is essential that Nitobond SBA is applied to sound, clean surfaces in order that maximum bond strength is achieved. Concrete should be free from contamination such as free water, mould oil or greases, laitance or dust. The use of Preco Hydrotard surface retarder is recommended during precast operation to provide a suitable surface for application of Nitobond SBA. If Preco Hydrotard is not used, grit blasting or mechanical scrubbling is recommended.

Mixing

Nitobond SBA is supplied in pre measured quantities with a total volume of 7 litres. Add the entire contents of the hardener (black) to the resin (white) and mix thoroughly with a Fosroc MR4 spiral mixing paddle attached to a heavy duty electric drill operating at not more than 450 rpm to avoid entrapping air. Mixing should be continued until an even grey colour, free from streaks is obtained. Mixing time should be 3 and 5 minutes. Ensure that the side and bottom of the container are scraped down thoroughly.

Application

The mixed adhesive should be applied by gloved hand or trowel, at a thickness of 2-3 mm.

The mixed epoxy should be used applied immediately after mixing and application must be completed within its specified Pot Life. Mating surfaces must be brought together and temporary stressing applied within the Open Time of the adhesive.

*** Note :** The mixed Nitobond SBA will heat up and cure very rapidly if held for any length of time in the mixing container, particularly at the upper application temperature range of the epoxy.

Cleaning

All tools and equipment should be cleaned immediately after use with Fosroc Solvent 102 before hardening of the adhesive. Hardened adhesive can only be removed mechanically.

Fosroc Nitobond SBA

Supply

| | |
|-----------------------------|---|
| Nitobond SBA 10 - 30 | : 7 Ltrs |
| Nitobond SBA 25 - 40 | : 7 Ltrs |
| Nitobond SBA 30 - 55 | : 7 Ltrs |
| Coverage | : 1m ² /Ltr @ 1 mm thickness |

Technical Service

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

Precautions

Health and Safety

Prolonged and repeated skin contact with epoxy resins and curing agents may cause dermatitis to persons sensitive to these products.

Gloves, barrier creams, protective clothing and eye protection should be worn when handling these products.

If accidental contact with epoxy occurs, it should be removed immediately with resin removal cream followed by cleaning with soap and water. **DO NOT USE SOLVENTS.**

Solvents promote penetration of the epoxy into the pores of the skin. Should eye contamination occur then wash with plenty of water and seek immediate medical attention. Ensure good ventilation and do not smoke during use.

Fire

Nitobond SBA is non flammable.

Fosroc Solvent 102 is flammable.

Ensure adequate ventilation. Do not smoke or use near a naked flame.

Flash Point

Fosroc Solvent 102 : 33°C

Storage

Shelf life at least 12 months when stored in dry place below 25°C in unopened containers.

Additional Information

Nitobond SBA is the generic name for Fosroc's segmental bridge bonding adhesive. It has previously been marketed under the product names Nitobond PCA, Nitobond PC and Nitobond ECP. As per the product re-branding protocol, the product will only be marketed in future as Nitobond SBA.

In case of high temperature grade 35 - 55, a tolerance of + or - 5° C temperature at both ends does not alter product performance.

* Denotes the trademark of Fosroc International Limited

† See separate data sheet



Important note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service. **All Fosroc datasheets are updated on a regular basis. It is the user's responsibility to obtain the latest version.**

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