

General purpose epoxy adhesive

Uses

For high strength bonding of common building materials. Typical uses include, but are not limited to, the following :

- Concrete
- Metals
- Glass
- Timber joints
- Fixing laminates/veneers
- Plastics and ceramics

Advantages

- **Strong** - adhesion tests show substrate failure (not on the glue line)
- **Versatile** - bonds most common building materials
- **Tough** - resistant to oil and chemical attack
- **Waterproof** - unaffected by immersion or sluicing
- **Easy to use** - one to one mixing
- **Economical** - simply mixing minimises wastage

Description

Nitofix is an easily worked, multi-purpose, medium viscosity adhesive, which is based on solvent free epoxy resins.

Nitofix is supplied as a two-pack material which, on mixing, cures to a high strength, oil, water, and chemically resistant film with exceptional adhesion properties.

Technical support

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

Properties

Joint strength (shear) -

| | |
|------------------------------------|------------------------------|
| Aluminium abraded or etched | : 33 MN/m ² |
| Steel, abraded or etched | : 14 to 20 MN/m ² |

Lap joint shear strength -

| | |
|---|-------------------------|
| Lead, tin, polythene, PVC with aluminium | : > 7 MN/m ² |
|---|-------------------------|

Linear coefficient of

| | |
|--------------------------|----------------------------|
| thermal expansion | : 60 x 10 ⁶ /°C |
|--------------------------|----------------------------|

| | |
|------------------------------|--------------------------|
| Modulus of elasticity | : 2000 MN/m ² |
|------------------------------|--------------------------|

| | |
|-----------------|-------------------------|
| Pot life | : 1 - 1.5 hours at 40°C |
|-----------------|-------------------------|

| | |
|-------------------|--------------------|
| Cure time* | : 12 hours at 40°C |
|-------------------|--------------------|

* **Note** : Stronger joints can be achieved if heating to a maximum of 100°C is observed during the curing period. Under such circumstances curing may be reduced to as little as 20 minutes.

Instructions for use

Surface preparation

All surfaces must be sound and thoroughly clean before Nitofix is applied. Smooth surfaces should be abraded or acid etched as appropriate - see below.

| Type of surface | Preparation |
|--|--|
| Concrete Cement etc | Dry - remove laitence and any loose aggregates |
| Metals Steel, brass, copper stainless steel etc. | Degrease, abrade or acid etch |
| Glass, ceramics | Degrease and abrade |
| Rubber | Treat with concentrated sulphuric or nitric acid for 5 minutes, or simply abrade |
| Timber | Dry and abrade |
| Plastics | Degrease and abrade |
| PVC | Wipe with trichlorethylene soaked rag and roughen |

Traces of oil and grease should be removed using a proprietary degreaser.

Fosroc Nitofix

Mixing

Equal quantities of each component should be scooped from the tins and mixed together thoroughly in a pliable polythene beaker or disposable, unwaxed cardboard carton using a spatula or palette knife. To avoid waste, only mix sufficient material for the work immediately at hand.

Bonding

The mixed Nitofix should be applied to both surfaces in a thin, even film and the two surfaces brought together. An adhesive layer of between 125 and 250 microns should be used.

Care should be taken to position the bond surfaces correctly, as cured joints can only be broken down with difficulty.

Excess pressure to the joint is to be avoided, in order to prevent extrusion of the adhesive, but slight clamping and support will be necessary.

Before leaving the adhesive to cure, any excess glue should be removed from the joint with a sharp knife. Solvent should **not** be used for this purpose, as it may remove adhesive from the joint.

Cleaning

All tools and equipment should be cleaned with Fosroc Solvent 102 immediately after use.

Limitations

- Curing of Nitofix takes place at temperatures above 5°C. At lower temperatures, curing will be significantly retarded.

Estimating

Supply

Nitofix : 1 Ltr or 40 Ltr packs

Coverage

Nitofix : 1.5 to 3 m² per Ltr

Note: Actual coverage will be dependent upon the application of the product

Storage

Shelf life

Nitofix has a shelf life of 12 months if kept in a dry store in the original, unopened packs at less than 20°C.

Precautions

Health and safety

The use of gloves and barrier creams (e.g. Kerodex 71, Rozalex 9) are advised when handling Nitofix. In case of contact with the skin, it must be removed with a resin removing cream (e.g. Kerocleanse 22, Rozalex 42) before it hardens. Follow by washing with soap and water, do not use solvent.

In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately - do **not** induce vomiting.

Fire

Nitofix is non-flammable

* Denotes the trademark of Fosroc International Limited

† See separate data sheet



Al Gurg Fosroc LLC

Post Box 657, Dubai
United Arab Emirates

www.fosroc.com

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.**

Head Office

telephone: (+9714) 2039699

fax: (+9714) 2859649

email: agf@fosroc.com

Regional offices

Abu Dhabi, Al Gurg Fosroc
Bahrain, YBA Kanoo
Kuwait, Boodai
Oman, Al Amana
Qatar, Tadmur

telephone: 673 1779
telephone: 17738200
telephone: 4817618
telephone: 24815080
telephone: 4432365

fax: 673 1449
fax: 17732828
fax: 4832124
fax: 24817554
fax: 4419517

email: abudhabi@fosroc.com
email: bahrain@fosroc.com
email: kuwait@fosroc.com
email: oman@fosroc.com
email: qatar@fosroc.com

