

# Fosroc Nitotile 489



constructive solutions

## Epoxy tile adhesive and grout

### Uses

As a chemical resistant adhesive and grout for bonding quarry and ceramic tiles to concrete or steel. Also suitable as a multi-purpose adhesive for bedding and repairs.

- Easy to apply
- Easy to clean up during application - can be washed off with water
- Long working life
- Waterproof
- High resistance to a wide range of industrial chemicals
- Good adhesion to steel, concrete and tiles

### Standards compliance

Nitotile 489 meets the requirements of ANSI specification A118.3 E5.5 and complies with BS6920:Part 1:2000.

### Description

Nitotile 489 is a three component solvent free epoxy resin based adhesive consisting of a white base, a black hardener and specially selected filler. The components are mixed together to give a smooth non-slump paste adhesive and grout.

### Properties

<b>Compressive strength</b> (BS 1881, Pt 116)	:	83 N/mm <sup>2</sup>
<b>Tensile strength</b> (ASTM C307-61)	:	16.6 N/mm <sup>2</sup>
<b>Bond shear strength</b> (ANSI A118.3 E5.5)	:	7.0 N/mm <sup>2</sup>
<b>Slant Shear Bond Strength</b> (BS 6319: Pt 4)	:	35.0 N/mm <sup>2</sup>
<b>Flexural strength</b> (ASTM C580)	:	32 N/mm <sup>2</sup>
	<b>@ 20°C</b>	<b>@ 35°C</b>
<b>Specific gravity</b>	:	2.0
<b>Pot life</b>	:	2 hours
<b>Open time</b>	:	2 hours
<b>Adjustability time</b>	:	3 hours
<b>Initial set</b>	:	8 hours
<b>Initial cure</b>	:	24 hours

### Instructions for use

#### Preparation

All surfaces should be clean and free from dust, loose particles and grease. Oil and grease contaminated concrete surfaces should be treated with proprietary chemical de-greaser and then washed well with clean water. Steel surfaces should be grit blasted to SA 2 1/2 and the adhesive applied within 3 hours of blasting.

#### Mixing

The base and hardener components should be individually stirred to re-disperse any settlement. The base and hardener should then be mixed together until a uniform grey paste is obtained. The filler should then be incorporated using a slow speed drill and paddle.

#### Application

The mixed adhesive should be spread over the surface using a serrated trowel or comb. Tiles should be placed within the open time of the adhesive.

#### Cleaning

The tile adhesive can be removed from tiles, tools and mixing equipment before initial set using a damp rag. After initial set the use of Fosroc solvent 102\* and / or mechanical removal will be necessary.

### Limitations

Application should not commence if the temperature is below 5°C or if the substrate is affected with either frost or ice. Nitotile 489 should not be applied to damp or wet surfaces nor should it be exposed to moving water during application. If any doubts arise concerning substrate or temperature consult your local Fosroc office.

### Technical support

Fosroc offers a comprehensive technical support service to specifiers, end users and contractors. It is also able to offer on-site technical assistance, an AutoCAD facility and dedicated specification assistance in locations all over the world.

# Fosroc Nitotile 489

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## Estimating

### Supply

Nitotile 489	:	10 litre packs
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### Coverage

Nitotile 489	:	5.0 m <sup>2</sup> @ 2 mm thickness
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## Storage

When stored at 30°C in dry conditions in the original, unopened packs, Nitotile 489 will have a shelf life of 12 months.

## Precautions

### Health and safety

Some people are sensitive to epoxy resin systems and solvents. Ensure adequate ventilation and avoid inhalation of vapours. Wear suitable protective clothing, gloves and eye protection.

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 sought.

Gloves and barrier creams such as Kerodex 71 or Rozalex 9 should always be used when handling Nitotile 489. If contact with skin occurs a resin removing cream such as Kerocleans 22 or Rozalex 42 should be used followed by washing with soap and water. **Do not** use solvent. If swallowed, do not induce vomiting. Seek medical advice immediately.

### Fire

Fosroc Solvent 102 is flammable. No smoking. Ensure adequate ventilation. Do not use near a naked flame.

### Flash points

Fosroc Solvent 102	:	33°C
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For further information, refer to the Product Material Safety Data Sheet.

## Additional Information

Fosroc manufactures a wide range of complementary products which include :

- waterproofing membranes & waterstops
- joint sealants & filler boards
- cementitious & epoxy grouts
- specialised flooring materials

Fosroc additionally offers a comprehensive package of products specifically designed for the repair and refurbishment of damaged concrete. Fosroc's 'Systematic Approach' to concrete repair features the following :

- hand-placed repair mortars
- spray grade repair mortars
- fluid micro-concretes
- chemically resistant epoxy mortars
- anti-carbonation/anti-chloride protective coatings
- chemical and abrasion resistant coatings

For further information on any of the above, please consult your local Fosroc office - as below.

\* Denotes the trademark of Fosroc International Limited

† See separate data sheet



**Fosroc Chemtech  
Construction Chemicals**

### 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

6th of October City, 3rd Industrial Zone, Arab Republic of Egypt.  
Tel: (02) 38242045 / (02) 38242046  
Fax: (02) 38242098  
E-mail: [Egypt@Fosroc.com](mailto:Egypt@Fosroc.com)

### Alex. Branch

156 Port-Said St. Al-Ibrahimeya, Kesm Bab  
Shark-No.5, 1st floor.  
Tel: (03) 5925264