

Polymer modified deformable and waterproof, tile adhesive

Uses

Nitotile EN is a high-performance and deformable adhesive for the permanent fixing of ceramic wall and floor tiles including porcelain and fully vetrified tiles, ceramic mosaics, quarry tiles, dark natural stone, terrazzo and brick slips. It can also be used for fixing of insulating and acoustic boards based on expanded polystyrene etc. Typical uses include :

- Wet areas - kitchens and bathrooms
- Swimming pools
- Fixing marble tiles (upto 40kg/m² on vertical)
- Fixing heavy elements e.g. brick slips, concrete tiles
- Bridges, underpasses, and high-rise buildings
- External claddings

Advantages

- Tropical grade to suit Middle East working conditions
- Deformable adhesive
- Good open wet time
- Good slip resistance
- High adhesive bond strength
- Water proof
- Good slip resistance
- Suitable in totally submerged conditions

Standards compliance

Nitotile EN is C2TES1 classified by EN 12004 and also classified by the ANSI A118.4

Description

Mixed with water, easy to use high adhesion at different type of substrates with vertical slip resistance, formability and extended open time

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.

Properties

Density	: 1.65 kg/l
Consistency	: Powder
Colour	: Grey and White
Tensile adhesion strength	
(EN 2004 -2)	
28d sc	: >1.4 N/mm ²
7d sc+21d water	: >1.2 N/mm ²
14d sc+14d 70°C+1d sc	: >1.3 N/mm ²
Tensile adhesion strength	
Open Time (EN 12004-2)	: 30 min > 0.5 N/mm ²
Transverse deformation	
(EN 12004-2)	: > 2.5 mm
Shear Strength (ANSI 118.4)	
(after 7 days)	
Glazed wall tile (Type A)	: 2.2 N/mm ²
Porcelain mosaic tile (Type C)	: 1.67 N/mm ²
(after 7 days - water immersion)	
Glazed wall tile (Type A)	: 1.5 N/mm ²
Porcelain mosaic tile (Type C)	: 1.1 N/mm ²
(after 28 days)	
Quarry Tile (Type C)	: 1.6 N/mm ²
Porcelain mosaic tile (Type C)	: 1.17 N/mm ²
(after 1 day)	
Porcelain mosaic tile (Type C)	: 0.58 N/mm ²
Slip Resistance	: <0.5mm
Adjustability time	: Approx. 40 mins
Open time (EN 2004-2)	: > 30min
Application temperature	: +5 to +40°C
Pot Life	: 6 Hrs
Wall grouting	: After 4-8 hours
Floor grouting	: After 24 hours
Set to light foot traffic	: After 24 hours
Ready for use	: 14 days
VOC	: <1 g/l

Fosroc Nitotile EN

Instructions for use

Surface preparation

All surfaces must be sound and thoroughly clean before Nitotile EN is applied. All traces of grease or oil must be removed with a chemical degreaser. All loose particles of mortar, old wallpaper, paint etc. must be physically removed.

Surfaces

Nitotile EN can be applied directly on concrete, cement screeds, and cement or lime mortar. Special attention must be given to new construction prior to commencing tiling. Tiles should not be placed on concrete or blockwork until all shrinkage movement has taken place.

Note : To use Nitotile EN on gypsum or gypsum board substrates, diluted Nitobond PVA (1 : 3 with water) should be applied to the surface of the gypsum or gypsum board prior to application of Nitotile EN.

Mixing

6.25 litres of water is required for each 25 kg bag of Nitotile EN. A slow speed drill fitted with a Fosroc Mixing Paddle (MR4) and 30 litre mixing vessel are recommended. Add powder to water and mix for 3 minutes until a uniform and lump-free consistency is achieved.

Application

Nitotile EN should be spread on the substrate to a uniform thickness of 2-10 mm, and then combed horizontally.

In case of applying extra large tiles & unlevelled superstate or tiles recommended double spreading technique

Place tiles firmly into adhesive bed, ensuring good contact with a twisting motion. Only apply to areas which can be tiled in the adhesive's open wet time (normally up to 1m² at a time).

Joints

It is recommended that when fixing ceramic tiles, a minimum spacing of 2mm be left around each tile.

Finishing

Remove excess adhesive with a damp cloth before the material has set.

Cleaning

Nitotile EN should be removed from tools, equipment and mixers with clean water immediately after use. Cured material can only be removed mechanically.

Grouting

Grout installation should be after a minimum of 24 hours curing time at 25°C. Grout with Nitotile XS Grout**, depending on the floor application.

Limitations

- Nitotile EN should not be used when the temperature is below 5°C and falling.
- The product should not be exposed to moving water during application. If any doubt arise concerning temperature or substrate conditions, consult your local Fosroc office.

Fosroc Nitotile EN

Storage

Shelf life

Nitotile EN has a shelf life of 12 months if kept in a dry store in the original, unopened bags.

Storage conditions

Store in dry conditions in the original, unopened bags or packs. If stored at high temperature and / or high humidity conditions the shelf life may be reduced.

Estimating

Supply

Nitotile EN	:	25 kg bags
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Yield

Nitotile EN	:	Approx. 18.4 litres/ 25 kg bag
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Note : Actual yield will vary according to water addition

Coverage

Coverage depends on the surface profile and roughness of the substrate, size and reverse profile of the tiles and the placing technique

Precautions

Health and safety

Nitotile EN contains cement powders which, when mixed with water or upon becoming damp, release alkalis which can be harmful to the skin.

During use, avoid inhalation of the dust and contact with the skin or eyes. Wear suitable protective clothing - eye protection, gloves and respiratory equipment (particularly in confined spaces).

The use of barrier creams to provide additional skin protection is also advised. In case of contact with the skin, rinse with plenty of clean water, then cleanse thoroughly with soap and water.

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

Nitotile EN is non-flammable

* 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.**

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

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

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

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



Al Gurg Fosroc Co. LLC

Post Box 657, Dubai
United Arab Emirates
www.fosroc.com