



Nitofill WS60

Polyurethane based semi-flexible injection resin

Uses

Stops the flow of water when injected into cracks in concrete in the presence of water. Nitofill WS60 provides an effective system for sealing static cracks in wet conditions.

Advantages

- Seals against water: reacts and produces foam resistant to water
- Penetrates deep in fine cracks
- Reacts with water and swells exerting pressure on the substrate sealing against water penetration
- Free expansion: 1700% - 2200 %
- Does not shrink after curing
- Excellent adhesion to mineral construction materials (such as concrete, cement and brick and metal)
- The reaction speed can be controlled by varying the amount of hardener
- Nitofill WS60 foam is chemically resistant against water, weak acids, and alkali, mineral oils, fungus and bacteria, ground water, sea water and petroleum products.

Description

Nitofill WS60 is a two part liquid; it reacts when mixed with water to form a semi-flexible, polyurethane foam barrier. Because of the low viscosity and the expansion during polymerisation the resin will penetrate deep into the crack.

Properties

Colour	Dark brown
Free expansion	%1700 - 2200
Density	
Base	1,1 – 1,2 kg/l
Hardener	0,947 kg/l
Viscosity at 25°C	
Base	111 mPas
Hardener	8 mPas

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.

Reaction time with water

65 gr resin + hardener + 20 gr water

	Hardener	Start Reaction	End Reaction
10°C	% 2	55 sec	4 min 18 sec
	% 6	26 sec	1 min 38 sec
	% 9	20 sec	1 min 10 sec
15°C	% 2	46 sec	4 min 06 sec
	% 6	21 sec	1 min 34 sec
	% 9	18 sec	1 min 15 sec
20°C	% 2	44 sec	3 min 30 sec
	% 6	19 sec	1 min 17 sec
	% 9	13 sec	54 sec
25°C	% 2	13 sec	3 min 15 sec
	% 6	18 sec	1 min 16 sec
	% 9	12 sec	51 sec

Instructions for use

Preparation

Ensure all contact surfaces are free from oil or grease contamination and suitably prepared to allow the Nitokit Surface Sealant to bond.

Injection packers should be inserted into holes drilled at a 45 degree angle to the surface such that they intersect the crack. The distance between each packer is typically between 200 mm and 500 mm depending on the width of crack, depth of crack and degree of water penetration / water pressure.

Crack surfaces

It will be beneficial to cover the crack surfaces before the application to ensure full filling in the crack. Nitomortar FC (B) epoxy-based repair and adhesive mortar can be used for this purpose. Crack surfaces should be opened in a V shape. And it must be filled with Nitomortar FC(B) as described in the product brochure. For through cracks in slabs and walls, both sides of the crack may be sealed.

Nitomortar FC(B) can be used on damp surfaces but should not be used to seal cracks where running water is present.

Allow to cure of Nitomortar FC(B) before application.

Injection

Before commencing ensure the first packer to be injected has its non-return valve fitted. All other packers should be open. Note for vertical applications, normally the lowest packer is injected first.

Pre-weigh required quantities of Nitofill WS60 resin and hardener. Mix together thoroughly using a drill and paddle. Mix only the amount which can be used within the pot life.

Pour the mixed material into the hopper of the injection equipment being used. Connect the outlet hose to the first

Nitofill WS60

injection packer and activate the pump.

When resin or foam is seen coming from the next injection packer, deactivate the pump immediately and install a nonreturn valve onto the next packer. Move the injection hose to the next packer and repeat until the entire crack is sealed.

Limitations

Nitofill WS60 is only suitable for filling static cracks, where a more flexible foam is required consider Nitofill UR63.

At high water pressures on wide cracks Nitofill WS60 may not be capable of stopping water, Contact Fosroc for more information.

If no water is present in the structure use lowest hardener level and add 1 part water to 4 part resin to the resin component prior to mixing. It is advisable to use disposable cartridges when adding water to avoid obstructing pump equipment and pipes.

Cleaning

Tools and application equipment should be cleaned immediately after use using a proprietary polyurethane cleaner for Nitofill WS60 and Fosroc Solvent 105 for Nitokit Surface Sealant. Once cured material can only be removed mechanically. Spillages should be absorbed with sand or sawdust and disposed of in accordance with local regulations.

Clean pump and manual equipment every time there is a stop of more than 15 minutes with a proprietary cleaner, or whenever necessary and at the end of the injection. Flush with an extra 1/4 litre of cleaner.

Supply	
Nitofill WS60	
Base	25 kg drum
Hardener	2,5 kg drum
Nitomortar FC(B)	4,0 litre (7,1 kg) packs
Fosroc Solvent 105	5 litre

Storage

Shelf life is 12 months in its unopened package. It should be stored away from sunlight, in a dry environment at temperatures between +10°C and +30°C.

Precautions

Health and safety

For further information refer to appropriate Product 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.

* 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.

MACON ATEE

Απόλλωνος, Λυγαριά Πυλαίας
55535, Θεσσαλονίκη

τηλέφωνο:
+30 2310 428 900

φαξ:
+30 2310 415 100

email:
info@macon.com

www.macon.gr

www.fosroc.com