Fosroc®
Nitofill® PU130

constructive solutions

Hydrophobic polyurethane semi-flexible grout for leak sealing

Uses

Nitofill PU130 is a multi-purpose injection resin used to seal leaking cracks, failed joints and to fill voids or fractures in concrete structures. The single component system utilizes an accelerator to “adjust” the reaction profile as needed for job site conditions. Typical applications include:

- Sealing against leaking cracks and joints
- Sealing against water in masonry and brickwork
- Void filling
- Back grouting

Advantages

- Can withstand high hydrostatic pressures
- Variable reaction times
- Semi-flexible
- Reacts with saline and mineral water
- Solvent free, environmentally safe

Properties

Test results shown are for cured foam (unless stated otherwise) at 25°C, with 2.5% water and 2.5% Accelerator added.

Density:	32 kg/m^3 (ASTM D-1622)
Water Absorption:	<1% (ASTM D-2127)
Shear Strength :	118 kPa (ASTM C-273)
Tensile Strength:	202 kPa (ASTM D-1623)
Elongation:	44% (ASTM D-1623)
Viscosity of resin:	500 cps (ASTM D-1638)
Colour of resin:	Amber
Gel Time:	1:15 (min:sec)

Reaction Data Using Nitofill PU130

Laboratory testing with the addition of 2.5 % water. This information should be used as a guide only. As each job will have varying conditions, customer should perform their own trials to find the optimum amount of Accelerator for each job.

Temperature °C	% Accelerator	Initiation Time (seconds)	Expansion Time (minutes:seconds)	Foaming Ratio
10	**2.5**	**50**	**3:15**	**>20 x**
20	**2.5**	**19**	**2:10**	**>25 x**
25	**2.5**	**15**	**1:15**	**>28 x**
30	**2.5**	**11**	**0.55**	**>31 x**
25	**0.00**	**43**	**5:20**	**>18 x**
25	**1.25**	**23**	**2:50**	**>21 x**
25	**2.50**	**15**	**1:15**	**>28 x**
25	**5.00**	**12**	**0:55**	**>29 x**

Description

Nitofill PU130 is a multi-purpose hydrophobic polyurethane injection resin which is mixed with nominated levels of accelerator to initiate expansion in the product to seal leaking cracks and joints in concrete and fill voids in generally inaccessible locations.

Design Criteria

Nitofill PU130 is mixed with up to 5% accelerator to initiate expansion in 12 seconds to produce a foam with >29 times original volume in 55 seconds at 25°C.

Fosroc®
Nitofill® PU130

Application Instructions

High pressure packers and couplers should be used for the injection of Nitofill PU130. Nitofill Steel Packer 10mm x 95mm or Nitofill Steel Packer 13mm x 100mm connected to Nitofill Coupler 4 Jaw will produce a reliable application. The grease nipple valve allows pumping hose to connect/disconnect quickly with positive shut-off.

Application

The following application notes are a guide only. The application may vary depending on project conditions and circumstances.

Drill appropriate size hole hole at a 45° angle to intersect the crack or joint approximately half way through the thickness of the concrete (300mm wall, drill to intersect at 150mm depth).

The injection packers inserted into pre-drilled holes shall be fixed at intervals along the length of each crack.

The distance between each packer will depend upon the width and depth of the crack. Spacing shall be close enough to ensure that the resin will penetrate along the crack to the next point of injection.

It is recommended that the material be conditioned to appropriate temperatures for at least 12 hours prior to application.

Pump Nitofill PU130 resin slowly until resin appears on face of crack. Start at lowest point and work upwards.

Reaction with water results in the formation of a semi flexible polyurethane foam which is hydrophobic and chemically resistant. The use of Nitofill Accelerator is optional. Add the accelerator to Nitofill PU130 (up to 5% per 20kg drum, depending on the required reaction time).

The pre-mixed resin can be pumped by means of a single component in injection pump that is equipped for high pressure. Following the injection, the pump must be thoroughly cleaned with Fosroc Solvent 10.

Note: Always make sure that the material is homogeneous, mix the resin using a dry clean drill and paddle mixer for a minimum of 15 seconds before application.

Important: Keep containers sealed whilst not being used. Moisture may be absorbed into the Nitofill PU130 from the atmosphere causing it to react. Careful consideration should be given to applications below 10°C on a falling thermometer to avoid possible crystallization.

Cleaning

Nitofill PU130 should be removed from tools, equipment and mixers with Solvent 10 immediately after use. Cured material can only be removed mechanically.

Supply

Nitofill PU130 20kg:	FC300899-20KG
Nitofill Accelerator 1kg:	FC300901-1KG
Fosroc Solvent 10 4 litre:	FC600800-4L
Nitofill Steel Packer 10mm x 95mm (MOQ pack of 100):	FC344228-UNIT
Nitofill Steel Packer 13mm x 100mm (MOQ pack of 100):	FC344227-UNIT
Nitofill Coupler 4 Jaw (MOQ pack of 5):	FC344226-UNIT

Storage

Nitofill PU130 has a shelf life of 12 months from date of manufacture if kept in a dry store in the original, unopened packs.

Important notice

A Safety Data Sheet (SDS) is available from the Fosroc website. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

FOSROC *construction solutions*

*Manufactured and sold under license from Fosroc International Limited. Fosroc and the Fosroc logo are trade marks of Fosroc International Limited, used under license.

Parchem Construction Supplies Pty Ltd
1956 Dandenong Rd Clayton VIC 3168
Ph: 1800 812 864
www.fosroc.com.au ABN 80 069 961 968

Distributed in New Zealand by: Concrete Plus Ltd
150 Hutt Park Road Gracefield Ph: 0800 657 156
www.fosroc.co.nz NZBN 9429033691282