

# Fosroc® Nitoseal® PU400



constructive solutions

(Replaces Emer-Seal PU40)

## High performance polyurethane sealant for joints in trafficable and water immersed applications

### Uses

For sealing trafficable floor joints, metal or concrete water retaining structures, joints in concrete culverts and pipes, metal frame building assembly, cover plates and covering, bolted lap joints and sealing pipe penetrations in walls and floors.

Also suitable for use as a sealant or adhesive.

### Advantages

- Ideal for wide floor joints
- Tough and abrasion resistant
- Suitable for foot and light vehicle traffic areas
- Excellent primerless adhesion
- Low stringing
- Low odour
- Weather resistant
- Easy to gun out
- Suitable for water immersed applications when used with appropriate primer (check application with Parchem)
- Complies to AS/NZS 4020:2005 Products in Contact with Potable Water

### Description

Nitoseal PU400 is a low modulus elastomeric joint sealant/adhesive based on polyurethane technology. Nitoseal PU400 uses a cure system reacting on exposure to atmospheric moisture. When cured it forms a waterproof and durable seal, which makes it ideal for exterior applications.

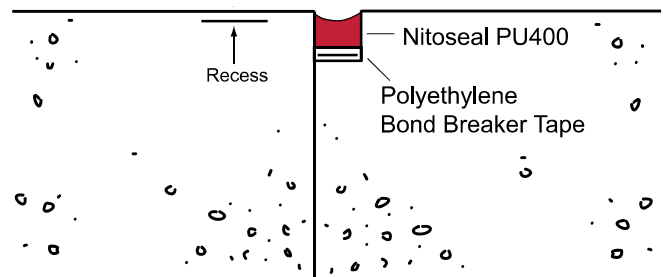
### Technical Support

Parchem offer a comprehensive range of high performance, high quality construction products. Parchem also offer a technical support package to specifiers and contractors which includes on-site, technical advice from staff experienced in the construction industry.

### Design Criteria

Nitoseal PU400 may be applied in joints between 15mm and 35mm wide.

### Typical construction joint



### Maintenance

There are no special requirements, however, any damage found during routine inspections should be cut out and replaced.

### Specification Clauses

Where so indicated on the drawings, joints are to be sealed using Fosroc Nitoseal PU400, a one part polyurethane joint sealant as supplied by Parchem. The sealant must be capable of  $\pm 12.5\%$  joint movement, have an elongation at break greater than 400%, Shore A hardness of 40 and an elastic modulus at 100% elongation of 0.30 - 0.40MPa.

Joints must be prepared and primed where required in accordance with the current technical data sheet.

The product manufacturer must be accredited to ISO 9001. The sealant and associated materials must be installed by an experienced contractor.

### Properties

Data quoted are typical for this product but do not constitute a specification.

<b>Form:</b>	Smooth, non-slump paste
<b>Movement accommodation factor:</b>	$\pm 12.5\%$ (total 25%)
<b>Tack-free time:</b>	40 mins (+/-10 mins) at 23°C, 50% RH
<b>Cure speed:</b>	24 hours to 3 mm
<b>Typical hardness Shore 'A' (ISO 868):</b>	40
<b>100% Modulus (ISO 8339):</b>	0.30 - 0.40 MPa
<b>Elongation at break:</b>	>400%
<b>Continuous service temperature range:</b>	- 40°C to + 70°C
<b>VOC content:</b>	105.6g / litre

# Fosroc®

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### Application Instructions

#### Preparation

The joint surfaces must be thoroughly dry, clean and frost free. Remove all dirt, laitance, curing compounds, form release agents, loose materials and foreign matter from the joint faces. Remove all rust, scale and protective lacquers from metal surfaces. Non-porous surfaces should be degreased using Fosroc Solvent 10.

In all joints a bond breaker must be used to prevent sealant contact with the back of the joint, to allow optimum sealant performance.

Deep joints should incorporate a backing strip such as Expandafoam or Hydrocell to support the sealant while also acting as a bond breaker.

#### Priming requirements

Priming of porous substrates is always recommended, however good adhesion can be gained on concrete, timber, metals, ceramics, brickwork and most coating surfaces without the use of primers. Adhesion is improved with use of a primer. To achieve optimum adhesion to concrete and other porous materials use Primer 21; on non-porous materials such as metals use Primer 4. Primer 13 must be used on porous surfaces if the Nitoseal PU400 is to be water immersed.

#### Gun Loading

Nitoseal PU400 is applied using a suitable sealant gun. Insert the sausage into the gun, cut a slit in the top of the sausage, replace the end cap and apply the sealant.

#### Application

Extrude sealant firmly into joint to ensure complete contact with joint faces. Smooth finish if necessary with a spatula.

#### Cleaning

Clean tools immediately after use with Fosroc Solvent 10.

### Limitations

Nitoseal PU400 is not suitable for sealing joints in swimming pools - Nitoseal SC600 is recommended for these applications (refer to Nitoseal SC600 TDS).

Do not apply Nitoseal PU400 to bituminous surfaces nor allow bitumen to contact Nitoseal PU400. Nitoseal MB175 is recommended for these applications (refer to Nitoseal MB175 TDS).

Paintability - although polyurethane sealants will generally accept painting with acrylic coatings, it is possible for plasticisers to migrate over time and stain the surface of the coating. Parchem does not recommend painting over Nitoseal PU400 and recommends the use of Nitoseal MS250 in these applications.

### Supply

Nitoseal PU400 is supplied in 600 ml foil sausages.

### Material codes

Nitoseal PU400 Concrete Grey	FC920121-600ML
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### Coverage

As a guide, one 600 ml sausage will supply 3 metres of 20mm x 10mm sealant bead

### Shelf life

Shelf life is 15 months when kept in its original, un-opened packaging and stored in dry conditions between +10°C and 25°C with 55% relative humidity, away from direct sunlight and moisture.

#### Important notice

A Safety Data Sheet (SDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. 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.



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