# **Fosroc Nitoseal PU40**

# FOSROC

# Formerly Known as Nitoseal HP40

constructive solutions

### One part polyurethane sealant

#### Uses

Nitoseal PU40 sealant is designed for sealing expansion and control joints, pre-cast concrete panel joints, window perimeters, steps, risers, roof and tilt-wall joints and between construction materials of dissimilar expansion coefficients.

Nitoseal PU40 sealant may be factory or field applied to seal various construction components. Some substrate surfaces may require priming for optimum performance.

#### **Advantages**

- Single component minimizes wastage
- Easy to Apply
- UV stable
- Strong adhesion to most common building substrates

# **Standard compliance**

Nitoseal PU40 sealant meets or exceeds the test requirements of:

- ASTM C-920 Types S, Grade NS, Class 25, Use NT-A, Use M-A and Use 0-A.
- DIN EN ISO11600:2002 Type F 25LM
- US Fed Spec TT-S-230a Type II

# **Description**

Nitoseal PU40 sealant is a one component, moisture curing, non-sag, gun-grade polyurethane elastomeric sealant.

It is designed to seal construction joints that are subject to movement. After cure, Nitoseal PU40 forms a flexible resilient rubber that has adhesion to a wide variety of substrates. A tack-free skin is formed during the curing process in 2 to 4 hours at normal conditions (23°C). Cure rates vary with changes in temperature and humidity.

# **Application**

Insert sachet in to Fosroc Jumbo Gun. Cut end off sachet and attach cap and nozzle and cut nozzle to desired bead size. Mask joint sides and insert a suitable backing rod if required. Extrude firmly into joint and tool off using a suitable curved tool. Use only water (do not use detergent and water).

#### Cleaning

Clean equipment immediately after use with Fosroc Solvent 102.

## **Design Criteria**

Nitoseal PU40 can be applied to joints between 6 mm and 50 mm wide and applied between 6 mm and 25 mm deep.

Joints which are expected to experience continual cyclic movement should be designed such that the sealant is applied to an optimum width to depth ratio of 2:1subject to the overriding recommended minimum sealant depths of: a) 6 mm for accurately formed, non-porous surfaces such as glass and metal, b) 10 mm for precast concrete, in-situ concrete, brick and other porous surfaces.

The sealing slot should be formed using a backer rod which supports the sealant during application and provides a bond breaker at the base of the slot to allow movement to be accommodated over the full width of the sealant.

#### **Properties**

Characteristic	Result
MAF:	25%
Sag	
(ASTM C639):	Non sagging
Hardness Shore 'A'	
(ASTM C661):	25 - 35
Application temperature:	5 - 50 °C
Service temperature range:	-40 to 100°C
Effect of heat ageing	
(ASTM C792):	No cracking/chalking
Stain & colour change	-
(ASTM C510):	No Stain
Tack Free Time :	18 minutes

#### Instruction for use

# Preparation

Ensure joint sides are square, clean and dry. Remove any laitance, dirt or other contaminants by wire-brushing, grinding or grit blasting.

# **Priming**

Priming is not generally required. Highly absorbent substrate should be primed. Primer 7E should be used, these should be used as follows:

Primer 7E - For use on concrete, stone, brickwork, timber and unglazed edges. One thin coat should be applied and allow to dry for some time.

# **Fosroc Nitoseal PU40**

# **Estimating**

#### Supply

Nitoseal PU40:	600 ml sachets
Primer 7E:	500 ml can
Fosroc Solvent 102:	4 litre can

Guide to quantities					
Joint size	Litres	per	Metre	Metre run per	
	run			600ml sachet	
6 x 10	0.06			10.00	
12 x 10	0.12			5.00	
20 x 20	0.40			1.50	
25 x 12	0.30			2.00	
30 x 15	0.45			1.33	

# **Storage**

## Shelf life

12 months if stored in the original unopened sachets in a cool dry place. Do not store in direct sunlight.

#### Limitations

#### Not recommended for the following:

- Unprimed joints that will be subjected to continuous water immersion.
- Joints that are contaminated with grease, wax, corrosion, bitumen or cement laitance.
- Horizontal joints in floors or decks where traffic or abuse is encountered.
- Special architectural finishes without proper testing.

# **Application limitations:**

- Nitoseal PU40 must not be applied to frost-bearing surfaces if temperature will be below freezing for more than 24 hours.
- Tooling techniques using solvents or soapy solutions are not recommended.
- All surfaces must be evaluated for adhesion prior to product acceptance.

#### **Precautions**

#### **Health and safety**

Nitoseal PU40 may be harmful if swallowed or inhaled and may cause skin and eye irritation. Product contains a very small amount of isocyanates and low flash point solvent.

Should accidental skin contact occur, remove contaminated clothing and wash with warm soapy water. Do not scrub.

If inhaled remove person to fresh air. Get medical advice if breathing becomes difficult. In case of contact with eyes, rinse immediately with plenty of clean water for at least 15 minutes and seek medical advice. If swallowed, give a glass of water to dilute and seek medical attention immediately - do not induce vomiting.

For further information, refer to the appropriate Product Material Safety Data Sheet.

#### **Fire**

Nitoseal PU40 does not readily support flame. Prime 7E and Solvent 102 is highly flammable liquid. Keep away from sources of ignition. No smoking. Containers should be tightly sealed when not in use. In the event of fire, extinguish with CO<sub>2</sub> or foam. Do not use water jet.

#### **Disposal**

Dispose according to local authority regulations. Do not dispose down drains or into local waterways.

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

# **Additional information**

#### Technical data - ancillary materials

	Primer 7E
Flash point:	23°C
Density:	1.05 kg/litre
Coverage:	8 - 10 m <sup>2</sup> /litre
Application	
temperature:	5 to 50°C
Drying time:	20 to 60 mins.
Flash point - Fosroc Solvent 102:	33°C

For further info please contact your local Fosroc office.



# 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 Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it.

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