

Fosroc® Nitoseal® MS400



constructive solutions

(Replaces Duraflex FC)

Ultra UV resistant elastomeric trafficable joint sealant

Uses

Seal moving or static joints in high performance applications where high strength is required such as;

- Trafficable floor joints in pavements and footpaths
- OEM Assembly
- Brick, blockwork and paving
- Most building materials

Advantages

- Easy to extrude – even at low temperatures
- 40% joint movement capability
- Outstanding weathering and UV resistance to maintain colour and integrity
- Excellent primerless adhesion to concrete, timber, masonry, aluminium, metal and ceramics
- Will not stain masonry surfaces
- Blister free cure in high humidity or on SSD (Saturated Surface Dry) surfaces
- Low odour and very low VOC 15g/L
- Contains no isocyanate

Description

Nitoseal MS400 is a high performance elastomeric trafficable joint sealant based on Silyl Modified Polymers. Nitoseal MS400 offers the weathering and adhesion performance of a silicone sealant together with the toughness and the stain-free properties of a polyurethane sealant.

Technical Support

Parchem offers a comprehensive range of high performance, high quality construction products. In addition, Parchem offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.

Design Criteria

Nitoseal MS400 may be applied in joints with a minimum width of 5 mm. The sealant Width to Depth ratio should be 1:1 for joints up to 10mm wide, kept at a minimum of 10mm for joint widths between 10mm and 20mm, and 2:1 for joint widths greater than 20mm. Install backing rod in joint to control sealant depth.

Maintenance

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

Properties

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

Form:	Smooth, non-slump paste
Colours:	Concrete Grey
Skin time:	50 mins @ 23°C and 50% RH
Tooling Time:	25 mins @ 23°C and 50% RH
Cure time at 25°C:	>2mm / 24h @ 50% RH
Typical hardness (shore A):	42
Joint Movement Capability:	Total 40% (+/- 20%)
Elongation at break	340%
Modulus @ 100%:	1.15 MPa
Continuous service temperature range:	-15 to 70°C
Specific Gravity:	1.49
VOC content:	15g/L

Specification Clause

Where so indicated on the drawings joints are to be sealed using Fosroc Nitoseal MS400, silyl modified polymer sealant as supplied by Parchem.

The sealant must be capable of +/-20% joint movement, have an elongation at break equal or greater than 340%, Shore A hardness in the range of 40-45 and a maximum tensile strength of 1.35 – 1.5 MPa. Joints must be prepared and primed where required in accordance with the current technical data sheet.

Application Instructions

Preparation

Joint surfaces must be clean, dry (SSD) and free from frost. Remove all dirt, laitance, loose materials and foreign matter. 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. In shallow joints self-adhesive polyethylene tape can be used. Deep joints should incorporate a backing strip such as Expandafoam Backing Rod to support the sealant while also acting as a bond breaker.

Priming requirements

Excellent adhesion can be gained on concrete, timber, metals, ceramics, brickwork and most coating surfaces without the use of primers. On some surfaces (such as FC sheet) however, adhesion may be improved by the use of a primer such as Primer 10 - refer to your local Parchem office for advice.

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Nitoseal® MS400

Gun loading

Nitoseal MS400 is applied using a suitable sausage gun. Insert the sausage into the gun, cut a slit at the top of the sausage, replace the end cap and nozzle and apply the sealant.

Application

Extrude the sealant firmly into joint to ensure complete contact with joint faces. Tool the sealant into the joint.

Cleaning

Clean tools immediately after use with an alcohol based solvent.

Limitations

Do not apply to bituminous surfaces nor allow bitumen to contact Nitoseal MS400.

Nitoseal MS400 is not suitable for application under water or continually immersed conditions. Do not apply to wet surfaces (free water present).

Paintability

Nitoseal MS400 is paintable with water based paints typically after a thick skin has been allowed to develop. Painting can actually be performed as soon as the sealant has skinned but there is a risk of damaging the sealant. For best results painting should be done no later than 7 days after sealant application. The flexibility of coatings being applied over Nitoseal MS400 should also be taken into consideration to ensure the coating can accommodate the expected movement in the joint.

Solvent based paint

Do not paint over Nitoseal MS400 using solvent based paints (eg. enamels).

Supply

Nitoseal MS400 is supplied in 600 ml sausages.

Material Code

Nitoseal MS400 Concrete Grey: FC920181-600ML

Nitoseal MS400 Special Colour (MTO): FC930202-600ML

Coverage

One 600 ml sausage will supply 6 metres of 10mm x 10mm sealant bead.

Storage

Shelf life 12 months. Store in a cool dry place.

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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