

(Replaces Duraflex® FC)

High 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
- Low stringing - smooth finish
- Long lasting flexibility
- 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
- Paintable with water based paints
- Blister free, fast cure in high humidity or on SSD (Saturated Surface Dry) surfaces
- Very low VOC 12g/L
- Contains no isocyanate / solvent free
- Australian made

Description

Nitoseal MS400 is a high performance elastomeric trafficable joint sealant based on Silyl Modified Polymers (Polyurethane hybrid) - Duraflex® technology. Nitoseal MS400 offers the weathering and adhesion performance of a silicone sealant together with the toughness of a polyurethane sealant.

Nitoseal MS400 is available in Concrete Grey, Black, White and made to order custom colours.

Design Criteria

Nitoseal MS400 is designed for sealing movement joints between 10mm and 35mm wide however joints down to 5mm and up to 50mm wide can be sealed under suitable conditions.

The movement accommodation factor (MAF) of a joint sealant must be considered in the design width and spacing of movement joints in a structure.

The sealant Width to Depth ratio should be kept at a minimum depth of 10mm for joint widths between 10mm and 20mm and 2:1 for joint widths greater than 20mm.

For further details contact Fosroc for specific advice.

Properties

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

| | |
|--|---------------------------|
| Form: | Smooth, non-slump paste |
| 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: | 42 Shore A |
| Joint Movement Capability: | Total 40% (+/- 20%) |
| Elongation at break | 340% |
| Modulus @ 100%: | 1.15 MPa |
| Continuous service temperature range: | Minus 15 to 70°C |
| Min. application temperature: | 5°C |
| Specific Gravity: | 1.49 |
| VOC content: | 12g/L (ASTM D3960) |

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 Fosroc for advice.

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 Fosroc Solvent 10.

Fosroc® Nitoseal® MS400

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 (60 to 90 minutes). 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 directly over Nitoseal MS400 using solvent based paints (eg. enamels). First apply a coat of water based paint, allow to dry then application of solvent based paint can proceed.

Supply

Nitoseal MS400 is supplied in 600 ml sausages in cartons of 12 and 200 litre drums (made to order).

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|---|----------------|
| Nitoseal MS400 Black 600ml: | FC920180-600ML |
| Nitoseal MS400 Concrete Grey 600ml: | FC920181-600ML |
| Nitoseal MS400 White 600ml: | FC920203-600ML |
| Nitoseal MS400 Special Colour 600ml (MTO*): | FC930202-600ML |
| Nitoseal MS400 Concrete Grey 200L (MTO**): | FC920181-200L |

*Made to Order: Min.order qty 120 x 600ml

**Made to Order: Min order qty 4 x 200L

Lead time: 14 - 21 days from approval of colour.

Coverage

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

Storage

Nitoseal MS400 has a shelf life of 12 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) 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.