One part, floor joint sealant

Uses
Nitoseal MS300 is suitable for sealing saw-cut and movement joints in internal floors, and external joints where abrasion resistance is required. It can also be used for external facade joints where a tougher seal is required.

- Factory floors
- Sports stadia terracing
- Shopping centres
- Warehouse and distribution depots
- Concrete hardstanding areas
- Prisons

Advantages
- Suitable for forklift truck traffic
- Suitable for saw cut and perimeter joints
- Abrasion resistant
- Withstands vehicular traffic
- Single component
- Fast rate of cure
- Easy to apply at low temperature
- Can be applied to damp substrates
- Primer-less for most applications (see "Priming" section)
- Hard, but flexible sealant; resists picking and vandalism

Description
Nitoseal MS300 is a one part, high modulus sealant based on hybrid silyl modified polyether technology. It has a rapid rate of cure and forms a tough elastomer capable of supporting heavy wheel loads.

Nitoseal MS300 may be applied between 6mm and 20mm wide, for trafficked joints (up to 40mm non-trafficked). In most cases it is recommended to form a sealing slot with a square cross-section, subject to a minimum 10mm depth. To ensure the sealant operates within its stated movement accommodation capacity the sealing slot widths should be designed in accordance with the recommendations of BS6093.

Properties

<table>
<thead>
<tr>
<th>Nitoseal MS300</th>
<th>Form</th>
<th>Paste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>&gt;65°C</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>Grey</td>
<td></td>
</tr>
</tbody>
</table>

For special colours contact Fosroc for further Information

Movement accommodation factor
- Butt joints 25%
- Lap joints 50%

Skinning time at 20°C/50% RH 25 minutes

Cure rate at 20°C, 50% RH
- 24 hours 3 mm
- 48 hours 6 mm
- 72 hours 8 mm

Application temperature 5°C to 50°C

Typical hardness
- Shore "A" at 20°C 45

Trafficking time at 20°C
- Light traffic 24 hours
- Heavy traffic 4 days

Modulus
- High

UV resistance
- Excellent

Service temperature range -20°C to 70°C

Application instructions

Preparation
Joints in concrete should preferably be sawn. After sawing all saw slurry must be flushed away and the joint allowed to dry.

When resealing the existing sealant should be removed from the joint and the arris cleaned back to sound clean concrete. Remove all debris. The joint surfaces must be dry, clean and frost free. Remove all contaminants by rigorous wire brushing, grinding or grit blasting.

Any expansion joint filler must be checked to ensure it is tightly packed and no gaps or voids exist at the base of the sealing slot before positioning a bond breaker.

Note: The use of a bond breaker is not required in expansion joints containing Hydrocell XL cellular polyethylene expansion joint filler. For construction or contraction joints a bond breaker tape or back-up strip should be used.

Where a particularly neat finish is required, mask the face edges of the joint before priming/sealing and remove immediately after tooling is completed.

Priming
Fosroc Primer MS2 is required for joints that are to be intermittently or permanently immersed, or where the substrate is likely to be saturated (for example, externally).

When using a primer, empty the entire contents of the hardener tin into the base tin and replace the base tin lid. Mix thoroughly by shaking for at least 2 minutes. Prime the joint face using a clean, dry brush. Avoid over application of primer causing puddles in the bottom of the joint.

Nitoseal MS300 should be applied between 30 minutes and 4 hours after priming.

If a joint is left unsealed for more than 4 hours, the primer should be removed by grit blasting or grinding and the joint re-primed.
Fosroc® Nitoseal MS300

Do not split packs of Fosroc Primer MS2.

Application and finishing
Cut end off sachet and place in Fosroc GX Gun. Fit nozzle and cut at 45° to a suitable size. Extrude the sealant firmly into the joint. Tool flush within 5 minutes of application to ensure good contact between the sealant and the substrate.

Cleaning
Clean tools immediately after use with Fosroc Equipment Cleaner.

Estimating
Guide to sealant quantities in traffic joints

<table>
<thead>
<tr>
<th>Joint size in mm</th>
<th>Litre per metre run</th>
<th>Metre per 600 ml sachet</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 x 10</td>
<td>0.06</td>
<td>10</td>
</tr>
<tr>
<td>12 x 12</td>
<td>0.144</td>
<td>4.17</td>
</tr>
<tr>
<td>20 x 20</td>
<td>0.40</td>
<td>1.50</td>
</tr>
<tr>
<td>25 x 20</td>
<td>0.50</td>
<td>1.2</td>
</tr>
<tr>
<td>30 x 20</td>
<td>0.60</td>
<td>1.00</td>
</tr>
<tr>
<td>40 x 25</td>
<td>1.00</td>
<td>0.60</td>
</tr>
</tbody>
</table>

0.75 litres of Fosroc Primer MS2 will be sufficient for 90m of joint. No allowance has been made for joint size or wastage.

Packaging
Nitoseal MS300 - 600 ml sachets. 10 no. sachets per box.

Fosroc Primer MS2 – 0.75 litre packs

Limitations
- Do not apply at temperatures below 5°C.
- Not suitable for contact with bituminous materials.
- Whilst Nitoseal MS 300 has excellent adhesion to many types of residual sealant its use should not be considered a substitute for a good standard of joint preparation.
- In large joints ensure sealant is sufficiently cured before trafficking. In 40 mm joints this could be up to 10 days.

Storage
Store in original containers in cool, dry conditions. Shelf life is 12 months if stored as above. Storage outside these conditions may reduce shelf life.

Precautions
Health and safety
Nitoseal MS300: This product is non-hazardous in normal use. For further information refer to appropriate Product Safety Data Sheet.
Fosroc Primer MS2 is highly flammable, see Product Safety Data Sheet for details.

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 of information given by it.

Nitoseal is the trade mark of Fosroc International Limited