Swellseal® Mastic WA

Caulk-applied, one-component, hydro-swelling mastic for sealing smooth and rough construction joints and pipe penetrations in wet or underwater applications

Product Description

Swellseal® Mastic WA is a one-component, grey, polyurethane-based, elastic, hydro-swelling mastic, supplied in cartridges and aluminium sausages, for the sealing of expansion joints and around pipe penetrations.

Swellseal Mastic WA cures and swells in the presence of moisture. Curing time is dependent on temperature and humidity conditions, i.e. curing time will reduce if RH and Celsius degrees are higher. Swellseal Mastic WA will become firm in 24–36 hours. Performance is not affected by the curing time.

Product Advantages

- Due to its special formulation, Swellseal® Mastic WA can be applied onto wet surfaces or in underwater applications.
- Solvent free.
- Swellseal Mastic WA adheres to concrete, PVC, HDPE, steel, fibre glass, etc.
- The excellent filling and adhesion properties of the product provide a first line filling of cracks and voids, even on lightly humid, smooth or rough surfaces.
- In contact with water Swellseal Mastic WA will expand to about 200% of it's original volume.
- Flexible system, which adapts to the irregular surface of the substrate.
- Easy application with a standard caulking gun.
- Durable: will exceed the construction's life.
- Good chemical resistance(*).
- Resistant against petroleum products, mineral and vegetable oils and greases.

(*) For chemical resistance please contact your local GCP representative.

Field of Application

- Sealing of joints of in-situ cast concrete in wet and underwater applications.
- Sealing joints between precast segments in wet or underwater applications (e.g. manholes, box culverts, cable ducts and pipes).
- Sealing of the locks between sheet piles.
- (*) For chemical resistance please contact your local GCP representative.

Application

Swellseal Mastic WA is preferably applied onto a dust-free concrete surface. The surface can be rough or smooth, moist or dry.
When applying Swellseal Mastic WA in underwater or very wet applications, be certain to cast the concrete within 6 hours to prevent premature swelling.

1. Application Method

For 310cc Cartridges

- Break the moisture-proofing aluminium foil on the top of the cartridge and remove the seamer from the bottom. Screw on the nozzle and cut diagonally at the appropriate position. Place the cartridge into caulking gun. For 600cc Sausages

For 600cc Sausages

- Put the sausage in the empty tube of the caulking gun and cut 1 cm off the top of the sausage. Close the tube and install the nozzle. Cut the nozzles diagonally at the appropriate position.
- Swellseal Mastic WA is applied in an uninterrupted band (minimum 10mm wide and high), placed with a caulking gun in the middle of the joint or prefab element (minimum concrete cover is 7cm).
- In case of fresh concrete, Swellseal Mastic WA should be covered by at least 7cm of concrete on both sides, in order to avoid cracks from the expansion pressure of swelling Swellseal Mastic WA.

Appearance

Pasty during application and rubbery after curing. Colour: grey.

Technical Data / Properties

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
<th>NORM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids</td>
<td>100%</td>
<td>Test DNC</td>
</tr>
<tr>
<td><strong>Uncured</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>Gel / Paste</td>
<td>Test DNC</td>
</tr>
<tr>
<td>Density (at 20°C)</td>
<td>Approx. 1.45kg / dm³</td>
<td>DIN 53504</td>
</tr>
<tr>
<td>Slump in Vertical Application</td>
<td>&lt; 5mm</td>
<td>Boeing test</td>
</tr>
<tr>
<td>Hand Dry (at 20°C and 60% rel. humidity)</td>
<td>10h</td>
<td>Test DNC</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 130°C</td>
<td>Pensky-Martens method</td>
</tr>
<tr>
<td><strong>Cured (7 days at 25°C, 10mm thick)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swelling Capacity in Contact with Water</td>
<td>Swells to approx. 200% of its original dry volume</td>
<td>Test DNC</td>
</tr>
</tbody>
</table>
Consumption

<table>
<thead>
<tr>
<th>NOZZLE DIAMETER</th>
<th>LENGTH (CARTRIDGE)</th>
<th>LENGTH (SAUSAGE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3mm</td>
<td>20 - 25m</td>
<td>40 - 50m</td>
</tr>
<tr>
<td>6mm</td>
<td>8 - 10m</td>
<td>16 - 20m</td>
</tr>
<tr>
<td>8mm</td>
<td>4 - 5m</td>
<td>8 - 10m</td>
</tr>
<tr>
<td>10mm</td>
<td>Approx. 3m</td>
<td>Approx. 6m</td>
</tr>
</tbody>
</table>

Packaging

<table>
<thead>
<tr>
<th>310ML CARTRIDGES</th>
<th>600ML SAUSAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 per cardboard box</td>
<td>12 per cardboard box</td>
</tr>
<tr>
<td>1 pallet = 75 cardboard boxes</td>
<td>1 pallet = 40 cardboard boxes</td>
</tr>
</tbody>
</table>

Weight per cartridge
- 0.55kg gross
- 0.50kg net

Weight per sausage
- 0.99kg gross
- 0.99kg gross

Storage

Minimum 12 months in a dry place at temperatures between 5°C and 30°C.

See shelf life information on the packaging.

Accessories

- Skeleton caulking gun for cartridges 310mL.
- Caulking gun for sausages 600mL closed tube.
- Nozzle for caulking gun 600mm closed tube.

To be ordered separately

Health & Safety

For full information consult the relevant Material Safety Data Sheet.
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Last Updated: 2018-08-27