

Swellseal Mastic WA

technical data sheet

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



• 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.

• 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, fibreglass, 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 its 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 to petroleum products, mineral and vegetable oils and greases.

• 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 °C are higher. Swellseal Mastic WA will become firm in 24-36 hours.
- Performance is not affected by the curing time.

• **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 310 cc 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 600 cc 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 10 mm wide and high), placed with a caulking gun in the middle of the joint or prefab element (minimum concrete cover is 7 cm).
- In case of fresh concrete, Swellseal Mastic should be covered by least 7 cm of concrete on both sides, in order to avoid cracks from the expansion pressure of swelling Swellseal Mastic WA.

• **technical data/properties**

Property	Value	Norm
Solids	100%	Test DNC
Uncured		
Viscosity	Gel / Paste	Test DNC
Density (at 20°C)	Approx. 1,45 kg/dm ³	Din 53504
Slump in vertical applications	< 5 mm	Boeing test
Hand dry (at 20°C and 60% RH)	10 h	Test DNC
Flash Point	> 130 °C	Pensky-Martens method
Cured (7 days at 25°C, 10 mm Thick)		
Swelling capacity in contact with water	Swells to approx. 200% of its original dry volume.	Test DNC

• **appearance**

- During application pasty, after curing rubbery.
- Colour: grey.

• **consumption**

Nozzle diameter	Length (cartridge)	Length (sausage)
3 mm	20 - 25 m	40 - 50 m
6 mm	8 - 10 m	16 - 20 m
8 mm	4 - 5 m	8 - 10 m
10 mm	Approx. 3 m	Approx. 6 m

• **packaging**

310 ml cartridge	600 ml sausage
12 per box	12 per box
1 pallet = 75 cardboard boxes	1 pallet = 40 cardboard boxes
Weight per cartridge: <ul style="list-style-type: none">• 0,55 kg gross• 0,50 kg net	Weight per sausage: <ul style="list-style-type: none">• 0,99 kg gross• 0,90 kg net

• **storage**

Minimum 12 months in a dry place at temperatures between 5°C and 30°C.
Shelf life: see packaging for information.

• **accessories**

To be ordered separately:

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

• **health & safety**

For full information consult the relevant Material Safety Data Sheet.

(*) For chemical resistances please contact your De Neef representative.

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