

Masterflex[®] 612

Swelling gasket in paste form

Description

Masterflex[®] 612 is a one component, moisture curing pre-polymer which is re-swellaible when in contact with water. It is suitable for the permanent sealing of construction joints in concrete structures.

Advantages:

- Simple use
- High swelling capacity in contact with water
- Highly resistant to chemicals and saline liquids (see chemical resistance table – available on request)
- Good adhesion to dry and moist surfaces (concrete, steel and plastics)
- Reversible swelling process

Fields of application:

- Construction joints of every kind (fig. 1)
- Connecting joints in sheet pilings (Fig. 2) or diaphragm walls.
- Sealing of bell butt joints.
- Wall penetration for metal, plastic and concrete pipes (Fig. 3), cable bushing.
- Bonding of Masterflex[®] 610 swelling waterstops on very uneven or rough surfaces. Masterflex[®] 610 swelling waterstops are pressed strongly into the paste bead.
- Surrounding steel reinforcement bars on pile heads.

Uses

- Masterflex[®] 612 swelling paste is supplied in ready to use cartridges.
- The substrate must be free of grease, dust and loose particles. Do not apply on frozen surfaces.
- Curing prior to concreting is minimum of 24 hours.
- The swelling paste should be kept dry and protected against premature swelling.
- When concreting, take care to ensure that the expanding paste is fully covered by concrete.

Packaging

- 310ml cartridge
- 6 x 310ml cartridges per carton
- 147 cartons = 882 cartridges per pallet
- Available on special request: 600ml cartridge
12 x 600ml sausages per carton

Directions for use

- The paste can be applied by a hand-held caulking gun
- Puncture and lift the double layer bottom of the cartridge, remove the pellets.
- Puncture the opening of the cartridge and free entire cross section.
- Cut the nozzle diagonally to obtain an opening of 6-10mm and place the cartridge in the caulking gun.

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- Direct the caulking gun along the surface at an angle of 45° extrude paste evenly and press the paste bead against the substrate.
- For larger jobs and for ease of application the use of pneumatic guns or mechanical guns with a high gearing is recommended.

Properties

- On contact with water, the cured swelling gasket paste swells and seals the construction joint against water penetration.
- An increase in volume of up to around 250% produced by storage of water in the paste's molecular structure can be achieved.

Layer thickness

- Approximately 5-10mm

Temperature

- +5° to +40°C

Low temperatures will render Masterflex[®]612 more difficult to extrude and retard the hardening process of the paste. During cold weather it is recommended to store the Masterflex[®]612 paste in warm storage conditions prior to use.

Yield

Depending on substrate approximately 5m per 310 ml cartridge.

Chemical resistance

| Test Liquid | Stability | Swelling |
|----------------------|------------------------------------|----------|
| Unleaded fuel | Resistant/discolouring | 45% |
| Gasoline | Resistant/discolouring | 2% |
| Toluene | Resistant | 140% |
| Xylene | Resistant | 85% |
| Methanol 50% | Resistant | 400% |
| Isopropanol 50% | Resistant | 500% |
| N-methylpyrrolidone | Limited resistant/ discolouring | 615% |
| Ethylacetate | Resistant | 195% |
| Methylisobutylketone | Resistant | 85% |
| Acetic acid 10% | Limited resistant | 150% |
| Formol 36% | Resistant | 500% |
| Sulphuric acid 10% | Resistant | 190% |
| Sulphuric acid 20% | Resistant | 210% |
| Sulphuric acid 26% | Resistant | 25% |

Shelf life

Masterflex[®] 612 has a shelf life of 9 months (stored at +5°C to +25°C) if stored in a well enclosed, cool and dry place.

Storage

Store under cover, out of direct sunlight and protect from extremes of temperatures.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Construction Chemicals SA's Technical Services Department.



The Chemical Company

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Safety precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

Note

For professional use only

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF Construction Chemicals SA representative. BASF Construction Chemicals SA reserves the right to have the true cause of any difficulty determined by accepted test methods

Quality and care

All products originating from BASF Construction Chemicals' SA facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001:2000.

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As all BASF's technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.

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