

MASTERFLEX[®] 611

Gun grade, hydroswellable waterbar

DESCRIPTION

Masterflex 611 is a single component, urethane modified, gun grade, hydroswellable waterbar for application in situations where pre-formed waterbars cannot be used.

FIELDS OF APPLICATION

MASTERFLEX 611 is recommended for sealing all narrow joints, cavities or gaps exposed to hydrostatic pressure. Applications include :

- insitu casting of 'gaskets' for sealing joints in piping and between precast elements.
- sealing of construction joints.
- use as a smoothing and adhesive paste over uneven joint surfaces before laying MASTERFLEX 610.
- repair works and sealing of gaps.

Note : If **MASTERFLEX 611** is used on exposed surfaces, the swelling effect from continuous rain may cause the unprotected part of the waterbar to bulge slightly.

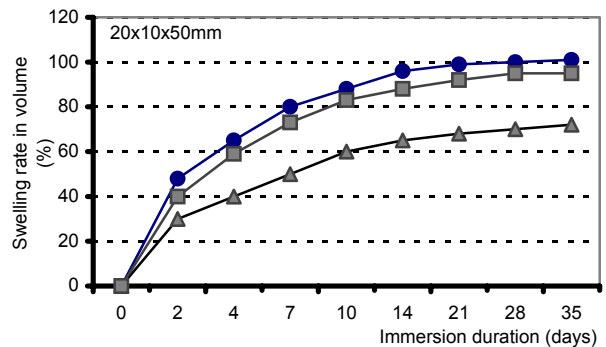
FEATURES AND BENEFITS

| | |
|---|--|
| Swells in contact with water by over 90% | Seals gaps effectively. |
| Water molecules held by molecular attraction | No wicking effect that could cause leaks. |
| Excellent adhesion | No leakage through bond interface. |
| Highly elastic | Prevents damage from swelling and shrinking cycles caused by wetting and drying. |
| Controlled swelling | Minimise the risk of damage to substrate. |
| Bonds to moist surfaces | Benefit in humid areas. |

TYPICAL PERFORMANCE

| | |
|-------------------------------|-----------------------------|
| Tensile strength (JIS A 6251) | : min 3.9 N/mm ² |
| Elongation (JIS K 6251) | : min 1000 % |
| Tear strength (JIS K 6252) | : min 12 N/mm |
| Swelling ratio (JIS K 6258) | : min 85% |
| Distilled water at 23°C | |

Swelling: Typical swelling behaviour of **MASTERFLEX 611** in distilled water is illustrated below. The swelling action depends on the solution to which it is exposed.



PROPERTIES

| | |
|-------------------------------|----------------|
| Appearance | : Paste |
| Specific Gravity (JIS A 1439) | : 1.29 +/-0.05 |
| Extrusion (JIS A 1439) | : max 5 sec |
| Slump (JIS A 1439) | : max 5 mm |
| Tack-free time (JIS A 1439) | : within 5 hr |

APPLICATION

Surface Preparation

Correct preparation is critical for optimum performance. Surfaces should be structurally sound, clean, and free from loose particles and sharp protrusion, oil, grease, or any other contaminant.

Repair any honeycombs and such other defects with a suitable repair mortar (consult BASF Construction Chemicals). Clear any standing water from the surface.

Insert the cartridge filled with **MASTERFLEX 611** into the frame of a standard sealant gun. Cut off the nozzle at a suitable distance from the end in diagonal to obtain an opening that best matches the width of the gap to be sealed or of the waterbar (MASTERFLEX 610) to be laid.

Placing

With the nozzle just above the substrate surface, gently and repeatedly squeeze the trigger depositing a continuous bead of **MASTERFLEX 611** into the gap or where the waterbar is to be laid. Avoid entrapment of air in the gunned material by matching the rate of advance of the gun nozzle with the rate of deposition.

BASF Construction Chemicals offices in ASEAN

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The Chemical Company

MASTERFLEX[®] 611

If using as a smoothing or adhesive paste for MASTERFLEX 610 (pre-formed waterbar), place the waterbar over the adhesive paste while it is still tacky and gently press to ensure bonding.

CURING

MASTERFLEX 611 is self curing. It achieves tack-free state within 5 hr. at 25°C.

Note : It is important to protect the waterbar from exposure to water until it is fully cured.

ESTIMATING DATA

The coverage in running metres of a 320 ml cartridge for common widths and thicknesses of application is given below.

| Application Depth in mm | Application width in mm | | | | |
|-------------------------|-------------------------|-----|-----|-----|-----|
| | 5 | 10 | 20 | 25 | 30 |
| 5 | | | 3.2 | 2.6 | 2.1 |
| 10 | 6.4 | 3.2 | 1.6 | 1.3 | 1.1 |
| 20 | 3.2 | 1.6 | 0.8 | 0.6 | 0.5 |
| 25 | 2.6 | 1.3 | 0.6 | 0.5 | 0.4 |

PACKAGING

Masterflex 611 is packaged in 320 ml (400 g) cartridges. 24 cartridges are packed per carton.

SHELF LIFE

Masterflex 611 can be stored in a well enclosed dry place for 6 months in unopened original packing away from heat and direct sunlight.

PRECAUTIONS

Health : Some people may be sensitive to certain resin systems. Wear impervious gloves and use hand barrier cream while handling the product. Prevent eye contact. Ventilate application area. Wash thoroughly after handling. Persons who are sensitive to the vapours must wear approved respirators.

Should skin contact occur, wash immediately with soap and water, or an effective hand cleaner.

In case of accidental eye contact wash with copious quantities of water and seek medical help immediately.

If ingested, do not induce vomiting. Consult doctor immediately.

If the inhalation of vapours is causing discomfort, remove to fresh air.

Fire : Product is flammable. Avoid exposure to naked flame or other ignition sources. Do not smoke while handling the product.

Flash point : 44°C

For Health, Safety and Environmental recommendations, please consult and follow all instructions on the product Material Safety Data Sheet.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this **BASF Construction Chemicals** publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

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