

### MONNELI MUREX

*Rapid Setting Water Plug Mortar*

#### Product Description

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A rapid setting water plug mortar composed of special blend of hydraulic cements, fillers, graded fillers and chemical additives. MUREX is a dry powder that when mixed with water, quickly sets and expands as it cures to provide a permanent watertight seal thereby stops rapidly active water leaks and seepage holes and cracks in concrete and masonry.

It does not promote corrosion on the reinforcements since the material contains non-metallic aggregates and non-corrosive agents.

#### Uses

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MUREX is an effective water plugging product that can be used for sealing cracks and construction joints in the following:

- Concrete
- Masonry walls
- Swimming pools
- Sea walls
- Reservoirs
- Sewage systems
- Pipes and mines
- Tunnels
- Fountains
- Water conduits and drains
- Ponds and piers

#### Advantages

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- Easy to use - requires addition of water only
- Excellent bond to concrete
- Rapid water-stopping capability
- Chloride free

- Non-toxic which makes it suitable for application in potable water tanks
- Diminishes thermal cracking due to its low exothermic characteristic
- Instantly stops active water or seepage under pressure

#### Instructions of Use

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##### Surface Preparation

Clean carefully the surface to be treated. Holes, cracks and fissures must be widened to assure a better anchorage of the product. Chisel out the leaking area to a minimum width and depth of 20 mm. It is recommended to cut the sides in a square-shaped manner, avoiding cutting it into a v-section. Make sure that all loose materials are removed.

The surfaces to be coated must be clean and free from dust, oils, grease, laitance, curing compound. When necessary, sand or shot blast, wet blast or high pressure water wash the area to be treated in order to ensure that all foreign matters and other surface contaminants are completely removed.

##### Mixing

Add MUREX to 24% of clean water and mix the product in a suitable mixing drum by hand or with a clean rod till a homogeneous malleable mixture is obtained.

Due to the rapid set characteristics of the product, prepare only a quantity of mortar which can be placed within the prescribed set time.

##### Application

After mixing, wait for about 10 to 15 seconds until slight warmth is felt. Press the product with strength into the crack, maintaining the pressure till the initial set is reached (about 45 seconds). Smooth the plugging, and remove the excess product.

Always start to treat the leaking surface from higher point down towards the lower part till the leakage is

totally stopped. Waterproofing products, if required, can be applied afterwards.

In case of general seeping from all over the surface, apply MUREX as a powder and spread it on the surface in a way to guarantee the blending between the powder and the seeping water.

To treat a leakage under high pressure, insert a plastic tube into the deepest possible point inside the crack to act as a drainage tube. Apply MUREX around the tube to eliminate the leakage area. Remove the drainage tube and proceed with the final blocking of the leakage.

To block the widespread pressure leakage, insert a plastic tube into the point of maximum leak and then apply MUREX.

### Cleaning

Clean the tools immediately after use with clean water. During work, it is recommended to place the tools in water while not in use.

### Recommendations

- The time of setting depends on the temperature
- MUREX should not be used when the temperature is below +1°C or if the temperature is expected to drop below +1°C within 24 hours.
- When working during high temperature season (above +35°C), shade the working area and use cold water for mixing.
- To accelerate at low temperatures use warm water while at high temperatures use cold water
- Do not expose packaging to direct sunrays.
- Do not add extra water than specified.

### Consumption

1.9 kg to fill volume of one liter

### Packaging

MUREX is supplied in 5 kg bags

## Technical Data

Properties	Results
Appearance	Cementitious grey powder
Density at 25°C	1.9 kg/L
VOC	2.0 g/L
Initial setting at 25°C	40-50 seconds
Final setting at 25°C	3-5 minutes
Compressive strength (ASTM C579) After 24 hours After 7 days After 28 days	13 N / mm <sup>2</sup> 39 N / mm <sup>2</sup> 47 N / mm <sup>2</sup>
Flexural strength (ASTM C580) After 24 hours After 7 days After 28 days	3.0 N / mm <sup>2</sup> 5.8 N / mm <sup>2</sup> 7.0 N / mm <sup>2</sup>
Chloride content (ASTM B1556-04)	0.03%
Service temperature	-5°C to 80°C
Noxiousity according to ECM 88/379:	No

All values are subject to 5-10 % tolerance

### Storage

Keep the product in a dry and sheltered place. Protect the material from all sources of moisture and frost. Shelf life is 6 months from the date of production if stored properly.

### Health & Safety

MUREX is a cement-based product. During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary. In case of contact with skin, rinse with water and again wash thoroughly with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly. If ingested, obtain medical attention immediately. Do not induce vomiting.

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MUREX  
Technical Data Sheet  
Edition: January 2020  
Revision: 02

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