

MonniPlug

Rapid Setting Water Plug Mortar

Product Description

MonniPlug is a rapid setting water plug mortar composed of special blend of hydraulic cements, fillers, graded fillers and chemical additives. MonniPlug 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.

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

Uses

MonniPlug 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

- ▶ 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 for Use

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 MonniPlug 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 MonniPlug 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 MonniPlug.

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
- ▶ MonniPlug 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 d
- ▶ Do not add extra water than specified

Technical Data

Category	Typical Values
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	13 N / mm ²
After 7 days	39 N / mm ²
After 28 days	47 N / mm ²
Flexural Strength (ASTM C580)	
After 24 hours	3.0 N / mm ²
After 7 days	5.8 N / mm ²
After 28 days	7.0 N / mm ²
Chloride Content (ASTM B1556 – 04)	0.03%
Service Temperature	From -5°C to +80°C
Noxiousity according to ECM 88/379:	No

All values are subject to 5-10% tolerance

Consumption

1.9 kg to fill volume of one liter

Packaging

MonniPlug is supplied in 5 kg bags

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 and Safety

MonniPlug 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.

Legal disclaimer

Monneli endeavors to ensure that any advice, recommendations, information it may give, is accurate and correct. It cannot accept any liability either directly or indirectly arising from the use of its products, because it has no direct or continuous control over where or how its products are applied, whether or not in accordance with any advice, specification, recommendation or information given by us. Monneli has the right to change any of the specifications mentioned in the Technical data sheets upon its discretion without prior notification. Hard copies of TDSs are printed once or twice a year, while our technical data sheets are continuously being updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.

VER.1.2019