

CHEMFIT RAPIDPLUG RP100

Rapid Setting Plugging Mortar – For Active Water Leak Stopping

PRODUCT DESCRIPTION

ChemFit RapidPlug RP100 is a rapid setting, high-performance plugging mortar specifically formulated for stopping active water leaks in concrete and masonry structures. The unique blend of fast-setting cements and additives allows the mortar to be applied directly into flowing water, where it sets within minutes to seal cracks, pipe penetrations, and construction joints. Ideal for emergency repairs in basements, tunnels, tanks, and below-grade structures.

PRIMARY APPLICATIONS

ChemFit RapidPlug RP100 is recommended for use in conditions such as:

- Stopping active water leaks through cracks, holes, and joints
- Sealing pipe penetrations and conduit entries
- Emergency repair of leaking basements, retaining walls, and manholes
- Plugging leaks in concrete tanks, reservoirs, and swimming pools
- Temporary sealing of water ingress before permanent repair

KEY FEATURES AND BENEFITS

- **Rapid setting** – Sets in 1-3 minutes, even under flowing water
- **Active leak stopping** – Applied directly into water flow
- **High adhesion** – Bonds to damp and wet concrete surfaces
- **Non-shrink** – Expands slightly to form a tight seal
- **Easy to use** – Just add water to stiff consistency; hand-apply
- **Chloride free** – Safe for use with reinforcing steel
- **Ready in minutes** – Can be overcoated or drilled after 15-30 minutes

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Fine, free-flowing powder
Color	Gray
Form	Powder (one component)
Basis	Rapid setting cementitious blend
Mixing Water	Add water to stiff, putty-like consistency
Initial Set (@25°C)	1 – 3 minutes
Final Set	3 – 5 minutes
Working Time	30 – 60 seconds
Application Temperature	+5°C to +35°C

COMPRESSIVE STRENGTH

- **30 minutes:** 5 – 10 MPa (725 – 1,450 psi)
- **1 hour:** 10 – 15 MPa (1,450 – 2,180 psi)
- **24 hours:** 20 – 30 MPa (2,900 – 4,350 psi)
- **28 days:** 30 – 40 MPa (4,350 – 5,800 psi)

PACKAGING AND STORAGE

Packaging:

- 5 kg pails / bags
- 25 kg bags

Storage:

- Store in original sealed containers in a cool, dry location
- Protect from moisture and humidity
- Keep bags off ground on pallets

Shelf life: 12 months from date of manufacture when stored properly

DOSAGE AND COVERAGE RATES

Yield per 5 kg bag (mixed): Approx 2.5 – 3.0 liters (stiff consistency)

Coverage: Varies with hole size and shape

- Small crack (10 mm wide x 10 mm deep): Approx 5 – 10 m of crack per kg
- Large hole (50 mm diameter x 50 mm deep): Approx 3 – 5 holes per kg

NOTE: Mix only small batches that can be applied within 30-60 seconds. Work quickly.

APPLICATION GUIDELINES

Surface Prep:

- Remove loose concrete and debris around leak
- Enlarge crack or hole to sound substrate (minimum 20 mm depth)
- For pipe penetrations, clean around pipe
- Do not need to stop water flow – product works under water

Mixing:

- Add powder to clean container; gradually add clean water while mixing by hand (gloved)
- Mix to a stiff, putty-like consistency (similar to clay)
- Do not add excess water (reduces strength, slows set)
- Mix only amount that can be applied within 30-60 seconds

Application:

- Form mixed mortar into a cone or ball
- Press firmly into the leak opening, starting from the center outward
- Hold firmly for 30-60 seconds until set
- For large leaks, apply in layers
- After plug sets (2-3 minutes), shape or trim excess if needed

Curing:

- No special curing required – sets under water
- Can be overcoated with repair mortar after 15-30 minutes
- Protect from freezing for 24 hours after application

HEALTH AND SAFETY

Alkaline – may cause severe eye and skin irritation. If eye contact: rinse 15 minutes with water, seek medical aid. Skin: wash with soap and water. If swallowed: do not induce vomiting – rinse mouth, drink water, seek medical aid. Use gloves, safety glasses, protective clothing. Avoid dust inhalation. Refer SDS.

CLEANG OF TOOLS

Clean tools with water immediately after use. Hardened material requires mechanical removal.

APPROVALS AND STANDARDS

ChemFit RapidPlug RP100 conforms to the following standards:

- Rapid setting plugging mortar for active water leak stopping
- **ASTM C1582** (chloride free – safe for reinforced concrete)
- Suitable for use in potable water structures (after full cure)
- Meets requirements for hydraulic cement based plugging compounds

LEGAL NOTES

All technical data provided in this Product Data Sheet is based on laboratory testing under controlled conditions. Actual field performance may vary due to differences in substrates, application methods, site conditions, and environmental factors. ChemFit makes no warranty of merchantability or fitness for a particular purpose. Users shall conduct their own trials to validate product suitability for the intended application. ChemFit reserves the right to modify product specifications without prior notice. For the most current documentation, request the latest Product Data Sheet and Safety Data Sheet from ChemFit.

CHEMFIT CONSTRUCTION CHEMICAL AND SERVICES LIMITED

Office No. 8, 1KM Near Gaey Soap, Sargodha Road, Faisalabad

Tel: +923364544837

Web: www.chemfitchemicals.com

Email: chemfit.pro@gmail.com