



TECHNICAL DATA

Waterproof Plug

Quick Setting Cementitious Water Plug

Description

Waterproof Plug is a quick-set waterproof cement composition used in hydraulic applications for stopping leaking and running water.

Rather than shrinking like normal cementitious products, **Waterproof Plug** expands in the plastic state. This plastic state expansion allows it to expand into all concrete spalled spaces, voids, crevices and cracks, creating a solid bond and maximum sealing between **Waterproof Plug** and the surrounding surfaces. **Waterproof Plug's** rapid setting properties provide instant bonding and plugging performance, minimising material erosion, strength loss and waste of material.

Waterproof Plug is recommended for instantly stopping the flow of water. Particularly where hydrostatic pressures exist or are expected. It can be applied on old or new concrete, block, brick, stone or any other surface to which cementitious products can bond.

Waterproof Plug is non-flammable, non-toxic, non-staining and does not produce any noxious fumes.

Areas of Application

- Tunnels
- Water Tanks
- Cable Vaults
- Basements
- Manholes
- Lift shafts
- Power stations
- Concrete pipes

The information contained in this Technical Bulletin is as up to date and correct as possible as at the time of issue. The data provided should be used as a guide only as the performance of the product will vary depending on differing operating conditions and application methods.

The sale of any product described in this Technical Bulletin will be in accordance with ITW Polymers & Fluids Conditions Of Sale, a copy of which is available on request. To the extent permitted by law, ITW Polymers & Fluids excludes all other warranties in relation to this product.

Features

- Fills and seals active leaks
- Resists hydrostatic pressure – true waterproof chemistry
- Rapid setting: 4 – 6 minutes
- Non-shrinking – increases in volume
- High Strength
- Has no toxic effect on drinking water
- Easy to apply – one part product
- Sets underwater

General Properties

Shelf Life	:	12 months unopened
Work Time	:	3 minutes @ 25 °C
Initial Set	:	4-6 minutes @ 25 °C
Shrinkage	:	Negligible
Compressive Strength – 1 Day	:	15 - 20 MPa
7 Days	:	19 – 22 MPa
28 Days	:	22 - 25 MPa
Application Temperature	:	5 °C – 35 °C
Operating Temperature	:	-10 °C – 150 °C

Estimating Data

Yield: Approximately 2.5 litres per 5 kg bucket.

Application Directions

Surface Preparation

- Open crack or holes to a minimum depth of 25mm. For high volume leaks, increase depth to a minimum 40 – 50 mm. A dovetail joint is preferable.
- Leave surface rough and remove all contaminated and loose materials to ensure good bonding. Thoroughly wet down all surfaces.
- Surface preparation guidelines can not cover all site or field contingencies and it is always recommended that an on-the-spot adhesion test be performed as part of the Standard Quality Assurance audit for the project.
- For high volume leaks, install rubber hose in the lowest section of the routed out cracks or hole.

Mixing

- Mix **Waterproof Plug** in a plastic container with clean water only.
- For best results, condition both **Waterproof Plug** and water to a minimum 20°C.
- Mix only as much material as can be placed within the **3 minutes working time**.
- Add only enough water so it has a putty consistency and can be made into a ball.
- 1 Kg of Waterproof Plug requires 140ml to 160ml of water.

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Application

- **Waterproof Plug** can be applied with a trowel, a spatula or by hand. **Make sure that rubber gloves are worn.**
- As the **Waterproof Plug** becomes warm, force into crack or hole with maximum pressure. If necessary, use external force to hold in place until a firm set takes place.
- For high volume leaks, install a rubber hose in the lowest section of the routed out cracks or hole. Firstly build up with **Waterproof Plug** around the rubber hose to anchor it. Thereafter, work crack from top to bottom.
- After **Waterproof Plug** has completely hardened and all leakage has been stopped, remove rubber hose and force more **Waterproof Plug** into the remaining hole with maximum pressure.
- For deep cracks, build up **Waterproof Plug** in layers, leaving the last 3 to 6 mm for an application of **Ezirender High Build** or **Eziseal Waterproofing Render**.
- Finish off surface and render flush with a minimum 3mm of **Ezirender High Build** or **Eziseal Waterproofing Render**.

Curing

- Warm Weather Applications. At high temperatures (>30⁰C) the cure rate will increase. By adding cold water this will aid in delaying the setting time. Allowing one to apply the material.
- Cold Weather Applications. At low temperatures (<10⁰C) the cure rate will be slower. By adding warm water this will aid in speeding up the setting time
- Cure time: 4 – 6 minutes @ 25⁰C

Cleaning

Clean tools and equipment immediately with water after use before it hardens. Hardened material can only be removed mechanically.

Limitations

- **Waterproof Plug** is not suitable for use on non- cementitious substrates.
- **Waterproof Plug** is not suitable for sealing expansion joints in concrete structures.
- Do not apply the coating on a gypsum plaster base.
- Do not apply on frozen or frosted surfaces.

Storage and Shelf Life

Waterproof Plug should be stored in a cool dry place. Do not expose pails to sun. Shelf life is 12 months in unopened pails.

Packaging

Waterproofing Plug is available in 5kg or 15kg weatherproof pails.

Ordering Information :

5kg	#991613
15kg	#991612

Safety Precautions

Waterproof Plug is non-toxic, but alkaline in nature. Gloves should be worn. Splashes to the skin or eyes should be washed off with clean water. In the event of prolonged irritation, seek medical advice. Keep contents away from children.

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TDG Code : Not Classified

Note

The figures quoted for work time, tightening time, loading time and hardening time are not definitive. They are dependent on job site conditions and will vary accordingly. In all cases we endeavour to provide typical figures for use as a guide.

Health & Safety Information

The product is hazardous. A Material Safety Data Sheet is available from the ITW Polymers & Fluids Technical Department upon request or available on our website www.epirez.com.au.

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