



ACTFLEX HYDROPLUG.

Technical Data Sheet

ACTFLEX HYDROPLUG is a rapid-setting, non-shrink cementitious compound designed to instantly stop **active water leaks** under pressure. It provides a **waterproof seal** for leaks in concrete and masonry surfaces, making it ideal for **cracks, holes, and penetrations** in areas exposed to continuous water ingress.

Features & Benefits

- Instantly stops **active water leaks** and flowing water
- Fast setting – cures within 1 to 3 minutes
- Non-shrink** formulation for a durable seal
- Cures to **high mechanical strength**, comparable to concrete
- Non-corrosive – does not affect steel reinforcement
- Non-toxic, non-staining, and **odor-free**
- Can be **sanded or ground** to match existing structural contours
- Compatible with **ACTFLEX 988 CWP** for areas requiring long-term waterproofing

Applications

ACTFLEX HYDROPLUG is suitable for **commercial, industrial, and residential** waterproofing applications, including:

- Water tanks & retention structures
- Basements, underground car parks, lift shafts & pits
- Concrete pipes, tunnels, power stations & sewer systems
- Joint sealing between concrete segments (e.g., pipes, culverts, tunnels, and mines)
- Wall/floor junction waterproofing in water-retaining structures (used with ACTFLEX 988 CWP)
- Rapid anchoring of bolts, pipes, conduits, and sanitary fittings

Surface Preparation

- Remove contaminants** – Ensure surfaces are **clean, dry, and free** from loose material, coatings, curing agents, oil, grease, moss, or algae.
- Prepare the substrate** – Grind out cracks, joints, or holes to a **minimum depth and width of 20mm**. For high-volume leaks, increase the depth to **40mm**.
- Profile correction** – Where possible, **square-cut or dovetail** the opening to improve adhesion (avoid "V" profiles).
- Dampen the surface** – Flush with clean water to remove dust and debris. Keep the area **moist** before applying ACTFLEX HYDROPLUG.

Mixing Instructions

- Use **clean water** (~20°C) for optimal strength.
- Mix manually** using a spatula – avoid electric mixers.
- Use **small amounts** (~0.5kg per batch).
- Water ratio:** 150ml per 1kg of product.
- Mix to a **putty-like consistency** and hold in a gloved hand until a slight warmth is felt, indicating initial setting.

Installation

- Apply the mix** – Press ACTFLEX HYDROPLUG firmly into the prepared opening.
- Hold in place** – Maintain pressure for **30 seconds to 1 minute** until it begins to set.
- Final cure** – Setting completes within **2 to 4 minutes**.
- Dampen the surface** – Mist with clean water or use a damp sponge for **15 minutes** to aid curing.

Note: Cold temperatures may **slow curing**. Use warm water to accelerate setting in colder conditions.

Post-Application Guidelines

- For larger areas, work **from the edges inward** to control water leaks effectively.
- Once set, ACTFLEX HYDROPLUG can be **sanded or ground** to match structural contours.
- For **wall/floor junctions**, cut and fill to a minimum **20mm width**, ensuring a **45° cove** (~40mm wide).

Membrane System Compatibility

For long-term waterproofing, apply **ACTFLEX 988 CWP** over the cured **HYDROPLUG** layer to protect against future dampness and seepage.

Packaging

Available in **5kg** and **20kg** pails.

Precautions

- Not suitable for expansion/movement joints.
- Not for use on non-cementitious surfaces.
- Do not apply over frozen substrates – ensure surfaces are free of ice.

Physical Properties

No.	Item	Index
1	Appearance	Powder with uniformity color, no impurities, no agglomerate
2	Curing Time/Min	Initial solidification time ≤ 5
		Final solidification time ≤ 10
3	Compressive Strength/MPa	1h ≥ 4.5
		3d ≥ 15.0
4	Flexural Strength/MPa	1h ≥ 1.5
		3d ≥ 4.0
5	Resistance Osmotic Pressure/MPa	7d ≥ 1.5
6	Bonding Strength/MPa	7d ≥ 0.6
7	Heat Resistance (100°C 5h)	No cracking, peeling and spalling
8	Freeze-thaw cycle 20 times	No cracking, peeling and spalling

Limitations

- ACTFLEX HYDROPLUG requires a clean, sound, and damp substrate to achieve proper adhesion. It is unsuitable for application over surfaces contaminated with oils, grease, or other substances that may prevent bonding. This product is specifically formulated for rapid setting and is not intended for use in temperatures below 5°C or above 35°C, as extreme conditions may affect its curing time and final strength. Additionally, excessive moisture in the substrate may influence performance, and proper surface preparation is crucial to ensure successful application.
- The correct mix ratio of ACTFLEX HYDROPLUG with clean water must be maintained to ensure optimal results. Any deviation from the recommended ratio may affect setting time and performance, leading to reduced durability or inadequate bonding. The product's curing time depends on environmental factors such as temperature and humidity, and premature exposure to heavy loads or
- water pressure before full curing may compromise its effectiveness.
- ACTFLEX HYDROPLUG is not designed for prolonged direct exposure to UV radiation or extreme weather conditions and may require additional protective coatings in such cases. Proper storage is essential, and the product should be kept in a cool, dry environment to prevent premature degradation. It is also not suitable for application over active leaks without first addressing the source of the water ingress.

Health and Safety, Storage

When handling ACTFLEX HYDROPLUG, appropriate personal protective equipment (PPE) must be worn, including gloves, safety goggles, and respiratory protection to prevent skin and eye irritation, as well as inhalation of dust or fumes. In case of skin contact, wash the affected area immediately with soap and water. If the product comes into contact with the eyes, flush with water for at least 15 minutes and seek medical attention if irritation persists. If inhaled, move to fresh air immediately and seek medical assistance if any symptoms develop. It is essential to review the Safety Data Sheet (SDS) for detailed health and safety measures before using the product.

ACTFLEX HYDROPLUG should be stored in its original, sealed packaging in a cool, dry, and well-ventilated area, away from direct sunlight and sources of heat. Proper storage conditions will help maintain its shelf life and performance. The product should be kept away from incompatible materials such as strong acids or bases and must be stored out of reach of children. Containers should always be tightly sealed when not in use to prevent contamination and deterioration.

Cleaning

All tools and equipment used with ACTFLEX HYDROPLUG must be cleaned immediately after use to prevent the material from hardening on surfaces. Since it is a rapid-setting compound, prompt cleaning with clean water is necessary while the product is still wet. Once the material

has hardened, removal will require mechanical means such as chiseling or grinding. It is recommended to dispose of cleaning residues in accordance with local environmental regulations to ensure safe handling and disposal.

Safety Precautions

When handling ACTFLEX HYDROPLUG, do not eat, drink, or smoke. The product is hazardous and may cause skin and eye irritation. In the event of contact, immediately remove contaminated clothing and rinse the affected area thoroughly. Inhalation of vapors or dust may cause respiratory issues, and appropriate breathing protection should be used at all times. Organic vapor respirators with particulate pre-filters and powered air-purifying respirators are not suitable. Always wear protective gloves, clothing, and safety goggles with side shields or face protection. If eye contact occurs, rinse immediately with plenty of water for at least 15 minutes and contact a doctor or

the Poisons Information Centre. If swallowed, do not induce vomiting and seek immediate medical attention.

ACTFLEX HYDROPLUG must be used in a well-ventilated area, and direct contact with humans, exposed food, or food utensils should be avoided. After handling, wash hands thoroughly with soap and water. In case of an emergency during transport, dial 000 for police or fire brigade assistance. Keep the product tightly sealed and stored in a ventilated place. Always follow local safety regulations and refer to the SDS for further information. The SDS can be downloaded from www.forspec.com.au. Keep out of reach of children.

Data Sheet

The Technical Data Sheet (TDS) and Material Safety Data Sheet (SDS) are updated periodically to ensure compliance with relevant Australian Standards and technological advancements. It is crucial to refer to the latest versions before use, as application methods and performance data may be revised. For the most current information, contact Forspec Protective Coatings at (02) 8021 3517 or email info@forspec.com.au. While this document provides general guidance, it should not be considered a substitute for project-specific specifications. For detailed recommendations tailored to particular applications, consulting directly with the manufacturer is advised.

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