

# Manta CW-Plug

Flash-Setting Hydraulic Cement (Waterplug)

## Description

Manta CW-Plug is an inorganic, rapid-setting hydraulic cement designed to instantly stop active water leaks and seepage in concrete and masonry structures.

When mixed with clean water, it undergoes a highly exothermic, ultra-fast curing reaction. It begins to set within minutes, actively expanding as it cures to form a watertight, high-density plug with early compressive strength far exceeding standard concrete. It is specifically formulated to be applied directly on wet substrates or even underwater.

## Typical Physical Properties

Manta code:	CW-Plug
Appearance:	Grey cementitious powder
Mixing Ratio (Water : Powder):	Approx. 1 : 3.5 by weight (0.28L water per 1kg powder)
Initial Set Time	1 - 3 minutes (Adjustable by water temperature)
Final Set Time	3 - 5 minutes
Compressive Strength (1 Day)	> 25.0 MPa
Toxicity	Non-toxic, zero-VOC (Safe for potable water)

## Features

- Instant Leak Stopping: Stops active, flowing water immediately upon application.
- Ultra-Fast Setting: Sets in 1 to 3 minutes; high early strength prevents wash-outs.
- Expansive Curing: Slightly expands as it sets, ensuring a tight, permanent mechanical lock within the pores and cracks.
- Rebar Safe: Chloride-free and non-corrosive to internal reinforcing steel.
- Eco-Friendly: Odorless, non-flammable, and perfectly safe for drinking water tanks and reservoirs.

## Application

1. Active Leaks: Instantly plugging flowing water leaks in basements, elevator shafts, retaining walls, tunnels, and swimming pools.
2. Detailing & Reinforcement: Forming waterproof coves (fillets) at wall-to-floor junctions and sealing around pipe penetrations before applying Manta CW-2K or CW-101 coatings.
3. Anchoring: Rapid embedding and anchoring of hooks, bolts, railings, and fixtures in concrete.
4. Defect Repair: Patching non-moving cracks, tie-holes, and honeycomb defects in rigid concrete structures.

## Application Guidelines

### 1. Surface Preparation (CRITICAL)

Do not use a "V" shaped cut. Chisel out the crack or hole to a minimum width and depth of 20mm, shaping it into a "U" shape (square cut) or a dovetail cut (wider at the base than the surface) to provide a mechanical key.

Flush the prepared area with high-pressure water to remove all loose particles, dust, and debris. The substrate must be thoroughly wet before application.

### 2. Mixing

Mix only what can be used within 2 minutes. Pour the required amount of clean water (approx. 0.28L per 1kg) into a clean container. Rapidly add the CW-Plug powder and stir vigorously for about 15 seconds until a stiff, lump-free, putty-like consistency is achieved.

### 3. Plugging Active Leaks

Mold the mixed putty in your gloved hands until it becomes slightly warm (indicating the reaction has started).

Force the plug firmly into the prepared hole/crack. Hold it tightly in place with sustained pressure for 2 to 3 minutes without moving it, until it is fully set and the water stops flowing.

Shave off any excess material flush with the surrounding surface immediately after it sets. (Note: After the leak is stopped, it is highly recommended to coat the surrounding area with Manta CCCW or CW-2K to ensure comprehensive waterproofing).

### Packaging

Available in 1kg and 5kg bags.

### Safety and Storage

**Exothermic Reaction Warning:** This product generates intense heat during the rapid curing process. Applicators must be cautious to avoid thermal burns when handling the mixed putty.

**Occupational Health (Strong Alkali):** Highly alkaline when mixed with water. Applicators must wear heavy-duty rubber gloves and safety goggles at all times. Avoid direct skin contact.

**Storage Conditions:** Store in a cool, strictly dry, and well-ventilated area between 0°C and 35°C.

Prevent rain and moisture exposure. Reseal partially used bags immediately.

Shelf life is 12 months when stored properly in original, unopened packaging.

### Contact Information

Nanjing Manta New Material Co., Ltd

Add: Room 102247, Building 17, No. 1 Qiliqiao North Road, Nanjing Area of the China (Jiangsu) Pilot Free Trade Zone, Nanjing, China

Factory: YanHua Industrial Park, Geputan Town, Yunmeng County, Hubei Province, China

Mob: 0086 18962800162

Mail: [inquiry@mantasil.com](mailto:inquiry@mantasil.com)      Web: [www.mantasil.com](http://www.mantasil.com)