



# Water-Based Capillary Inorganic Concrete Waterproofer

Silicate Mineral Solution for Concrete Waterproofing & Durability

## Product Description

The Water-Based Capillary Inorganic Concrete Waterproofer is a silicate-based solution with catalytic additives. It penetrates concrete and mortar substrates and chemically reacts with free calcium hydroxide to form stable crystalline compounds. These crystals block pores and microcracks, enhancing impermeability, reducing water absorption and improving durability. It is eco-friendly, odorless, water-based and suitable for both new construction and repair projects.

## Key Features & Benefits

- Silicate mineral formulation – water-based, eco-friendly and odorless.
- Capillary waterproofing – penetrates concrete and blocks pores and cracks.
- Durability – resists chloride penetration, carbonation and freeze–thaw cycles.
- Hardens surface, improves abrasion and dust resistance.
- Protects reinforcement by reducing chloride and moisture ingress.
- Easy to apply – spray, roller or brush on prepared substrate.

## Scope of Application

- Concrete bridges, tunnels, highways and coastal structures.
- Basements, retaining walls, reservoirs and water tanks.
- Water treatment facilities, dams and marine engineering works.
- Industrial floors, parking garages and warehouses.
- General concrete protection in industrial and civil projects.

## Performance Parameters (per JC/T 1018, Type II)

Test Item	Requirement
Appearance	Colorless, transparent, odorless liquid
Density	1.07 g/cm <sup>3</sup>
pH	11 ± 1
Viscosity	11.0 ± 1.0 s
Surface tension	36.0 mN/m
Gelation time (final)	≤ 400 min
Water permeability / Penetration height	≤ 35 mm
Weathering stability (10 cycles)	No visible change

## Construction Process

- Surface preparation: substrate must be clean, solid and free of laitance, dust, oil and contaminants.
- Application: apply evenly by spray, roller or brush until fully absorbed.
- Dosage: 3–5 m<sup>2</sup>/kg depending on substrate porosity.
- Curing: allow ≥24 h to react before water exposure or traffic.
- Conditions: apply above 5 °C; avoid rain, frost and direct sunlight.

## Packaging & Storage

- Supplied in 20 kg pails.
- Shelf life: 12 months in sealed containers under cool, dry and ventilated storage.
- Avoid freezing and direct sunlight.
- Once opened, use promptly.

## Disclaimer

The information in this Technical Data Sheet is based on laboratory tests and field applications and is provided in good faith. Sino-sina Building Materials Co., Ltd. makes no warranty for results obtained under conditions beyond its control. Users should verify suitability through on-site testing before full-scale application.