CETEX IWP

ADVANCED INTEGRAL WATERPROOFING COMPOUND

TECHNICAL DATA SHEET

Product Ref: CETEX-IWP-TDS-2026

PRODUCT OVERVIEW

CETEX IWP is a high-performance, water-based active silica solution specifically engineered for integral waterproofing of concrete and mortar mixes. When introduced during batching, it chemically reacts with atmospheric components and hydration products to form an insoluble, inert gel matrix deep within the capillary pores of the substrate.

Dual-Action Pore Plugging Mechanism

In dry conditions, CETEX IWP allows full vapor breathability, preventing internal pressure buildup. Upon contact with incoming liquid water, the reactive gel matrix swells dynamically to plug pores and capillaries, completely halting water penetration and dampness.

KEY FEATURES & BENEFITS

- **Active Pore Blocking:** Dynamic swelling action upon contact with water eliminates capillary absorption and moisture drive.
- **Vapor Permeable:** Maintains breathability of concrete/mortar, preventing moisture entrapment and surface blistering.
- **Extends Structural Life:** Substantially reduces water absorption, preventing freeze-thaw spalling (explosion) and protecting rebar against corrosion.
- **Preserves Original Appearance:** Clear, non-yellowing compound maintains natural concrete and masonry aesthetic.
- **LEED & Green Building Compliant:** Water-based, zero/negligible VOC, non-flammable, and eco-friendly formulation.

RECOMMENDED APPLICATIONS

CETEX IWP is suitable for all structural concrete and masonry plastering works where long-term water tightness is required:

- Roof slabs, podiums, balconies, and exposed concrete decks
- Basements, retaining walls, lift pits, and underground structures
- Water tanks, reservoirs, and swimming pool concrete mixes
- External render, plastering mortar, and jointing mortar

TECHNICAL PROPERTIES

PARAMETER	SPECIFICATION
Chemical Base	Soluble Silica Compound
Appearance	Colourless Liquid
pH Value	High Alkaline (> 11)
Solid Content	~ 40%
Specific Gravity	~ 1.25 ± 0.02 g/cm³
Flammability	Non-Flammable
VOC Content	Negligible (Water Based)

DOSAGE & COVERAGE

Recommended Dosage

250 ml to 500 ml per 50 kg bag of cement.

Note: Site trials are recommended to finalize optimal dosage based on target mix design and setting time requirements.

PACKAGING & STORAGE

Standard Pack	25 kg Carboys / Drums
Custom Packing	Available on request
Shelf Life	12 Months from MFG date
Storage	Store in frost-free area away from direct sunlight & heat

DIRECTIONS FOR USE & APPLICATION GUIDELINES

1. **Batching Dry Materials**

   Mix cement, sand, and aggregates thoroughly in dry state as per standard concrete/mortar mix design.

2 **Water Addition**

Add approximately 70-80% of the calculated total mixing water into the drum and mix to achieve uniform wetness.

3 **Admixture Dosing (CRITICAL)**

Measure the required quantity of **CETEX IWP** and add it directly into the remaining water or into the wet mix. **NEVER add CETEX IWP directly to dry cement or aggregates.**

4 **Final Mixing & Placing**

Mix for an additional 2 to 3 minutes to ensure homogenous dispersion throughout the batch prior to placement and compaction.

HEALTH, SAFETY & HANDLING PRECAUTIONS

CETEX IWP is highly alkaline. Direct contact with eyes or skin may cause severe irritation. Always wear protective gloves, safety goggles, and protective clothing during handling. In case of accidental contact, flush immediately with copious amounts of clean water and seek medical advice promptly. Refer to the Material Safety Data Sheet (MSDS) for comprehensive guidance.

Disclaimer: The information provided in this Technical Data Sheet is based on our extensive laboratory testing and field experience. However, since site conditions, workmanship, and application methods are beyond our control, CETEX Petrochemicals accepts no liability for any loss or damage arising from improper use or storage. Users are advised to perform site trials to verify product suitability for their specific applications.