

Technical Data Sheet TDS-696-01920

# **CWS**<sup>TM</sup>

**Crystalline Waterproofing Slurry** 



Building & Transportation



Oil, Gas & • Industrial









## PRODUCT DESCRIPTION

CTech-LLC® CWS<sup>TM</sup> is one-component cement-based crystalline slurry specifically designed for concrete waterproofing applications. When applied to concrete, CWS<sup>TM</sup> crystalline waterproofing slurry chemically reacts with water and un-hydrated cement particles to form needleshaped crystals that fill capillary pores and micro-cracks in the concrete and prevent any further water ingress.

#### **ADVANTAGES**

- Cement-based waterproofing slurry
- Excellent waterproofing characteristic.
- Can be applied on damp substrate.
- Penetrates the capillaries in concrete.
- Permanently active (in depth).
- Seals dynamic cracks up to 4 mm.
- One component (add water only).
- Effective against high hydrostatic pressure

## TECHNICAL DATA

	Unit	$CWS^TM$
Basis		cementitious
Density	kg/L	1.1
Appearance	-	grey powder
Compressive strength @ 28 days	N/mm <sup>2</sup>	25
Pot Life	min	30 to 60
Mixing Ratio	-	25 kg CWS <sup>™</sup> to 6.75 to 8.0 litres clean water
Material consumption		0.75 kg/m² in one coat 1.2-1.5 kg/m² in two coats

#### **TYPICAL USES**

The CWS<sup>TM</sup> can be applied to all structurally sound concrete – new or old. Typical areas of application are:

- Tanks
- Water-retaining structures
- Sewage treatment plants
- Channels
- Bridges
- Concrete slabs (floor, roof, balcony etc...)
- Parking structures

#### Foundations

#### **INSTALLATION PROCEDURE**

## PREPARATION OF SUBSTRATE

- All concrete to be treated with CTech-LLC® CWS<sup>TM</sup> must be clean and have an "open" capillary surface.
- All surfaces to be in contact with CTech-LLC® CWS<sup>TM</sup> product shall be free of oil, grease, laitance and other contaminants.
- Remove any bony or defective concrete.
- Surfaces must be carefully pre-watered prior to the CTech-LLC® CWS<sup>TM</sup> application.
- The concrete surface must be damp but with no wet sheen on the surface.

## MIXING

One bag (25 kg) of CTech-LLC® CWS<sup>TM</sup> should be mixed with 6.75 to 8.0 liters of clean water. Mix with a slow speed mixer for 3 minutes to a smooth, stiff consistency.

## **APPLICATION**

- Slurry consistency: Apply CTech-LLC® CWS<sup>™</sup> in one or two coats according to specification by masonry brush or appropriate power spray equipment. When two coats are specified apply the second coat while the first coat is still "green".
- Dry powder consistency (for horizontal surface only): The specified amount of CTech-LLC® CWS<sup>TM</sup> is distributed in powder form through a sieve or a semimechanical barrow spreader and troweled into the freshly placed concrete once this has reached initial set.



## **PACKAGING**

25kg/bag

## **STORAGE & SHELF LIFE**

12 months from the date of manufacture in original unopened sealed bag when stored in dry conditions

## **CAUTION**

This product may cause skin irritation. Do not inhale vapors. Provide adequate ventilation. Protect against contact with skin and eyes. Wear rubber gloves, long sleeve shirt, goggles with side shields. In case of contact with eyes, flush repeatedly with water and contact a physician. Areas of skin contact should be promptly washed with soap and water. Do not take internally.

## CTech-LLC®

CYTEC's Composite Technology technical@ctech-llc.com info@ctech-llc.com www.CTech-LLC.com

#### IMPORTANT NOTE:

Before using any CTech-LLC® product, the user must review the most recent version of the product's technical data sheet, material safety data sheet and other applicable documents, available at www.ctech-llc.com.

#### WARANTY:

CTech-LLC® warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within one month of the 'date of purchase. CTech-LLC® shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory. The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before utilizing.