TechCrete® Concrete Admix is a permanent waterproofing admixture. When added to concrete or mortar, insoluble crystals are formed and developed in the water-bearing capillaries of the mix, effectively blocking the passage of water and ensuring permanent water tightness throughout the life of the structure. TechCrete Concrete Admix can also be used in production of waterproofing mortars and surface applied slurry systems.

PERFORMANCE CHARACTERISTICS
Moisture and free lime within the mix combine with the active chemicals in the TechCrete Concrete Admix to create a continuous barrier of insoluble crystals which penetrate deep into the capillary structure of the concrete. These capillaries and interstices are blocked to the passage of water, whilst permitting the transmission of air and water vapor, enabling the structure to breathe.

The rate of crystalline development varies with the variations in the mix design and curing regime of the concrete. However the crystalline development is usually sufficient to provide full waterproofing properties approximately 7-10 days after placement.

TechCrete Concrete Admix is equally effective against both negative and positive water or osmotic pressure. After the initial crystallization process has successfully waterproofed the structure, the active chemicals within TechCrete Concrete Admix remain dormant in the concrete to offer long-term protection. Any later contact with water will reactivate the sealing process.

KEY BENEFITS
• Waterproofs for the life of the structure.
• Maintenance free.
• No future re-application.
• Seals present and future cracks up to 5/64” (2 mm).
• Lowers waterproofing costs by up to 40%.

TYPICAL APPLICATIONS
• Water Tanks and Towers
• Swimming Pools
• Water Treatment Works
• Harbors
• Concrete pipes
• Basements
• Reservoirs
• Dams
• Canals
• Lift pits
• Pre-cast
• Parking Garages

PRODUCT PROPERTIES
• Provides excellent waterproofing properties by becoming an integral part of the structure.
• Protects concrete and reinforcement against corrosive waterborne substances.
• Crystalline action reactivated by contact with water providing long-term additional protection.
• Effective against both positive and negative pressure.
• Non-toxic or tainting.
• Permits early backfilling without requirement for protection boards.
• Maintenance free
• Bridges non-structural hairline cracks up to 1/64” (0.4 mm)

APPLICATION
TechCrete Concrete Admix may be added to the concrete either at the batching plant or added to the mixer at the job site. It is preferable that TechCrete Concrete Admix is added to the dry mix to ensure even distribution prior to the addition of water. If TechCrete Concrete Admix is added after the addition of water, mixing must continue for an additional 10 minutes prior to placement of the mix. If there are questions contact the technical department at 800-610-2895.

Do not apply if the ambient temperatures are below +4°C (+39°F) or above +35°C (+95°F).

Application Rates
Normal: 22 ounces per cubic yard (0.8 kg per cubic meter) of Concrete.

Application Method
1. Apply the TechCrete Concrete Admix to the concrete mixture at about 22 ounces per cubic yard. If using pre-packaged product, 1 - bag per cubic yard.

Performance Timeline
All TechCrete Waterproofing Systems utilize a modified silicate gel forming technology to stop water penetration. All TechCrete Waterproofing products penetrate into the concrete to create a barrier to water, stopping the water from within the concrete rather than on the surface. The technology is catalytic in nature and requires between 3 – 5 days for the products to reach full water stopping capabilities. Full waterproofing should not be expected until complete gel formation has been achieved. NOTE: The surface will continue to accept water, so a flood test will be required to determine if full waterproofing has been achieved.
CURING
Concrete containing TechCrete Concrete Admix must be prevented from drying out too rapidly and should be kept damp for at least 7 days. Mist spraying with water and covering with polyethylene is effective to prevent drying. Curing compounds are not recommended for use with TechCrete Concrete Admix. Protect from weathering, sun, frost and wind for at least 7 days.

SHELF LIFE & STORAGE
Containers should be sealed and kept in a cool dry location. Avoid prolonged exposure to direct sunlight. If properly maintained this product has an unlimited shelf life.

PACKAGING
TechCrete Concrete Admix is packaged 22 ounces per water soluble package;
- 10 - 22 ounce packages in a 2-1/2 gallon pail
- 20 - 22 ounce packages in a 5 gallon pail
TechCrete Concrete Admix is also available in bulk.
- 396 lbs / Drum = 288 - 22 ounce bags

WARNING & SYSTEMS
The following warranties require the use of TechCrete Concrete Admix and are only available when the full system is applied by a TechCrete Certified Applicator:


The following warranties are available when using TechCrete Concrete Admix:

• New Construction: TechCrete 20-Year Limited Liability Material Warranty. This warranty requires the project to be registered.

• New Construction: TechCrete 2-Year Limited Liability Material Warranty.

For additional information about the Alchemco system specifications or available warranties, either contact your local Alchemco distributor or Alchemco’s Technical Department at info@alchemco.com or call 800-610-2895.

WARNINGS
HAZARDOUS
May cause irritation to skin. May cause skin to have allergic reaction. May cause serious eye damage. May cause irritation to the respiratory system.

PRECAUTIONS
Wear protective gloves, clothing, face and eye protection. If on skin wash with plenty of water. Remove person to fresh air and keep comfortable for breathing. If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs, seek medical assistance. Dispose of contents/container in accordance with national regulations.

See Safety Data Sheet for further details regarding safe use of this product. Alchemco 8590 Sanford Drive, Henrico, VA 23228. 800-610-2895.