

# Envirocrete™

## Crystallisation Waterproofing Admixture



### About Envirocrete™

Envirocrete™ is an integral waterproofing consisting of Portland cement, treated silica sand and various active chemicals. Added to concrete at batching, Envirocrete™ generates non-soluble crystals throughout the capillaries and pores in the concrete, creating a physical barrier to water.

### Typical Application

- Basements
- Tunnels
- Water tanks
- Precast concrete
- Water retaining structures

### Storage

Envirocrete™ should be stored at room temperature (min 10°C and max 38°C), kept dry and out of direct sunlight, ensuring a shelf life of 1 year.

## Installation Procedures

For waterproofing concrete, the recommended addition rate for Envirocrete™ is 0.8% - 1.2% by weight of cement. For enhanced chemical resistance please consult with Elmich to determine the approximate addition rate. Envirocrete™ is added to the concrete at the time of batching. The sequence of procedures for addition will vary according to the type of batch plant operation and equipment.

An ideal water cement ratio of 0.42± to ensure Envirocrete™ performs as specified.

### Curing

Normal practices for placing and curing concrete should be followed as laid out in your local standards.

## Benefits

- Maximizes waterproofing of concrete
- Will withstand extreme hydrostatic pressure > 7 bar
- Exceptional durability at -20°C to 50°C
- Reduces shrinkage and cracking
- Protection of concrete against certain aggressive chemicals including chloride attack to steel reinforcing
- Seal static cracks up to 0.4 mm
- Complies with SS 375: 2001 – Potable water

### Health and Safety

Envirocrete™ should only be used as directed. We always recommend that the Safety Data Sheet is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Safety Data Sheet is available upon request from your local Elmich representative.

## Technical Specification

### Water permeability

(BTD/TP/02/2002) <math>5.0 \times 10^{-13}</math>

### Water penetration

(BS EN 12390-8:2009)

@ 5 bar for 72 hours <math>< 20 \text{ mm}</math>

### Effects on setting time

None

### Chemical resistance

Resists mild acids and caustic materials in the pH range 3–12

**Note:** The information provided in this brochure is based on current knowledge and experience and does not infer any legally binding assurance or warranty, expressed or implied. Intending purchasers should verify whether any changes to specifications or applications or otherwise have been made since the issue of this literature. Environmental-friendly recycled materials are used wherever possible and physical product properties including colour may differ due to source of raw materials used. Colour may also fade due to UV exposure. All components of the product are designed for specific application, design calculations and any variation and/or deviation therefrom shall be the responsibility of the Specifier and/or User.



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