

# CONQOR B50 ADMIX

## Colloidal Silica Hydrogel Waterproofing for superior concrete durability

### TECH DATA SHEET

**NIL VOC**  
NON HAZARDOUS

#### PRODUCT DESCRIPTION

**CONQOR B50 ADMIX** is an additive that reacts when mixed in the concrete. **CONQOR B50 ADMIX** is a colloidal silica hydrogel offering internal and sub-surface waterproofing by reacting with alkalinity in the concrete and transforming all free moisture in the porosity into a hydrogel. Specifically formulated to produce high quality, impermeable concrete for use in any below or above ground, exposed or submerged concrete structure.

#### ADVANTAGES

- Internal waterproofing
- Enhances natural self-healing properties of the concrete
- Improvement in resistance against chemical attack
- Reduced vapour transmission
- Non-hazardous shipping regulations
- **Improved workability**
- Compatible with micro silica and silica fume

#### STANDARDS

- Conforms to the requirements of AS1478.1-2000 Chemical Admixtures for concrete, mortar and grout for type SN Admixture
- Conforms to the requirements of AS1012.21 Determination of water absorption and apparent volume of permeable voids in hardened concrete

#### LIMITATIONS

**CONQOR B50 ADMIX** does not seal moving cracks or construction joints.

#### CONCRETE MIX DESIGN

**CONQOR B50 ADMIX** has been formulated for use in all types of concrete and can be used in a wide range of water/cement ratio's. Ideally water/cement ratio is between 0.41 and 0.54. Trial mixes are always recommended to evaluate and assess the effect **CONQOR B50 ADMIX** has on impermeability of each particular concrete mix.

#### PRODUCT DATA

|                                 |                                                                    |
|---------------------------------|--------------------------------------------------------------------|
| <b>Form</b>                     | Liquid                                                             |
| <b>Appearance</b>               | Colourless                                                         |
| <b>Packaging</b>                | 20 litre pails                                                     |
| <b>Storage &amp; Shelf Life</b> | 24 months, providing not exposed to frost, heat or direct sunlight |

#### TECHNICAL DATA

**CONQOR B50 ADMIX** is a clear, environmentally neutral, non-toxic, and odourless colloidal silica liquid that reacts to form a hydrogel throughout the pore and capillary structure of the concrete thus creating an effective and permanent internal seal against penetration of water and other substances.

|                       |                             |
|-----------------------|-----------------------------|
| <b>Chemical Base</b>  | Waterborne Colloidal Silica |
| <b>Odour</b>          | Nil                         |
| <b>Packaging</b>      | 20 litre pails              |
| <b>Flammability</b>   | Nil                         |
| <b>VOC</b>            | 0% waterborne               |
| <b>Flash point</b>    | 71° C                       |
| <b>Ignition point</b> | 265° C                      |

#### BATCHING INFORMATION

##### Consumption / Dosage

**CONQOR B50 ADMIX** is dosed at 6.5ml per kg of cement. For most mixes up to 40MPa, dose 2L per m<sup>3</sup> of concrete.

##### Dispensing / Batching procedure

For ultimate results we recommend **CONQOR B50 ADMIX** is added into 70% of the batching mix water before introduction of any other mix materials e.g. cement, aggregate, fines etc. Reduced strength and workability can result if the **CONQOR B50 ADMIX** is not diluted before cement and aggregate contact. **CONQOR B50 ADMIX** has been formulated for use in all types of concrete and can be used in a wide range of water/cement ratio's. A mixing time of at least two minutes is recommended.

#### HEALTH & SAFETY

To avoid allergic reactions or skin irritation, we recommend to wear gloves and eye protection when handling.

#### WARRANTIES AND LIMITATIONS OF LIABILITY

Markham Global ("Seller") warrants that if any goods supplied prove defective in workmanship or materials, that the Seller shall replace them or refund their purchase price. The User holds harmless Markham Global of any liability arising from the improper use of **CONQOR B50 ADMIX** and user assumes all risk and liabilities whatsoever in connection therewith. The terms of this paragraph may not be orally modified. There are no warranties express or implied which extend beyond the face herewith.