

## PRODUCT INFORMATION BULLETIN

### DESCRIPTION

**AD-TEK AR** is hydrophobic pore-blocking admixture for watertight concrete.

**AD-TEK AR** is designed to reduce the rate of transmission of moisture and water-soluble salts (chlorides, sulphates etc.) through concrete.

**AD-TEK AR** is a chloride free organic admixture supplied in a fine powder form. It does not contain any chemicals that might cause undesirable significant side effects when used in conjunction with other typically used concrete admixtures.

**AD-TEK AR** reacts with the cement hydration products forming a hydrophobic film on pores in concrete, reducing capillary suction and minimising absorption and penetration of water, and preventing the ingress of potentially deleterious soluble materials, resulting in concrete with enhanced durability.

**AD-TEK AR** is classified by AS 1478.1-200 as a Permeability-Reducing Admixture.

When **AD-TEK AR** was tested in comparison with similar competitor products, its ability to improve water tightness in concrete was at least equal to competitors' products.

Unlike its competitor products, ADTEK-AR does not possess a strong ammonia smell.

### USES

- Water retaining structures
- Corrosion resistant floors, columns etc
- Tunnels and mining underground structures
- Marine construction
- Waste water treatment and desalination plants

### BENEFITS

- Significantly reduces water absorption and the permeability of water-soluble salts (chlorides, sulphates etc.), even in a low dosage rate.
- Reduces chloride diffusion and could be a cost-effective replacement for Silica Fume used for this purpose.
- Slightly increases initial compressive strength
- Decreases plastic shrinkage and crack development by minimising evaporation of water from the surface of fresh concrete.
- Does not affect water vapour permeability.
- Improves abrasion resistance of surface.

## RATE OF USE

Concrete	0.5 – 5 kg/ m <sup>3</sup>
Mortar (Render)	0.2 – 2% by weight of binder

Pre-trial tests for water absorption are a must.

## APPLICATION

**AD-TEK AR** should be added in a slowly rotating concrete mixer prior to charging concrete aggregates.

This technique minimises material loss, which may occur during the first seconds of initial mixing.

Ingredients of **AD-TEK AR** are not toxic; however, inhalation is not recommended.

Concrete modified by **AD-TEK AR** does not require a special technique of curing if not specified.

## PACKAGING, SHELF LIFE AND STORAGE

**AD-TEK AR** is available in 10 kg paper bags, plastic pales and in bulk on request.

**AD-TEK AR** has a shelf life of 12 months if kept in a dry store in sealed plastic pales. It should not be subjected to excessive pressure during storage in hot weather because of the risk of caking.

## SAFETY INFORMATION

Detailed safety information is contained in each material data safety sheet, which can be obtained from our sales offices.

Disclaimer: Any advice, recommendation, information, assistance or service provided by application is in good faith and is believed by AD-TEK PTY LTD to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by AD-TEK PTY LTD is provided without liability.