



CENTROX™ WR Water Permeability Reducing Admixture for Concrete and Mortar

PRODUCT INFORMATION BULLETIN

JANUARY 2010

DESCRIPTION

Centrox™ WR is an admixture designed to reduce the rate of transmission of moisture and water soluble salts through concrete.

Centrox™ WR 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.

Centrox™ WR 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.

Centrox™ WR is classified by AS 1478.1-200 Appendix F as a Class F4 – c Admixture.

USES

- Water retaining structures.
- Acidic corrosion resistant floors, columns etc.
- Tunnels and mining underground structures.
- Marine construction.
- Waste water treatment and desalination plant.

BENEFITS

- Significantly reduces water absorption even at a low dosage rate.
- Reduces chloride diffusion and can 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..... 0.6 – 6 kg / m³
Mortar (Render)..0.1–2% of weight of binder

APPLICATION

1. **Centrox™ WR** should be added in a paper bag in a slowly rotating concrete mixer prior to adding the concrete aggregates. This technique minimises some small material loss which may occur with the dusting during the first seconds of initial mixing.
2. Ingredients of **Centrox™ WR** are not toxic but inhalation should be avoided.
3. As mixing by hand only generates low shear forces, after initial mixing, allow the mixture to mature by leaving it stand for 5 minutes then resume before use.
4. No special curing techniques are required for **Centrox™ WR**. Cure as for normal concrete, modified concrete.

PACKAGING, SHELF LIFE & STORAGE

Centrox™ WR is available in 10 kg moisture resistant bags. Small bags (sizes on request). Bulk on request.

Centrox™ WR has a shelf life of 12 months if kept in a dry store in sealed bags. 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.