

POLYCRETE

PERMEABILITY REDUCING ADMIXTURE FOR CONCRETE AND MORTAR

DESCRIPTION

Polycrete Admix is an integral hydrophobicity admixture designed to reduce the rate of transmission of moisture through concrete. It does not contain chemicals that might cause undesirable side effects when used in conjunction with admixtures normally used in concrete.

Polycrete Admix used as an integral admixture in concrete, reacts with the cement hydration process to form a hydrophobic coating on the pore and void surfaces of concrete which reduces the capillary suction and minimizes absorption and penetration of water.

TYPICAL USES

- Most application requiring watertight concrete such as basement walls and floors, tanks, pipes, tunnels, silos and pools.
- Concrete blocks and bricks.
- Low cement content panels and claddings.
- Wall and tank foundation renderings.
- Concrete structure where subsequent application of render, tiles or paint is required.

POLYCRETE ADMIX has been tested by SIRIM QAS International Sdn. Bhd. in accordance to BS 6920 : Part 1 : 2000 (Suitability of Non-Metallic Product for use in contact with Water Intended for Human Consumption with regard to their effect on the Quality of water).

FEATURES AND BENEFITS

- ✓ **Improved Hydrophobic Coating**
 - Reduces permeability, Increases watertightness.
 - Increases durability. Reduces relative absorption.
- ✓ **Good Workability**
 - Good finishing characteristics for slab-work and off-form surfaces.
- ✓ **Good Cohesiveness**
 - Reduces segregation particularly in lean mixes and high slump concrete.

APPLICATION

Dispensing

- **Polycrete Admix** should be added separately to the initial batching water to ensure complete distribution throughout the mix. Use only drinkable water. Do not use sea water, bore water or water containing a high dissolved mineral content for mixing concrete.

Curing

- Similarly to cementitious mortars and concrete, concrete made with **Polycrete Admix** must be protected against rapid drying due to high temperature and/or strong winds. The use of wet burlap, plastic sheets or a curing compound is highly recommended.

Dosage

- Recommended dosage rate is 450ml – 550ml per 100kg of cementitious materials. For higher degree of water-repellency, use 800ml per 100kg of cement.

TYPICAL PERFORMANCE DATA

In comparison to plain concrete, a mix containing **Polycrete Admix** develops better watertightness of the concrete.

PERMEABILITY (ML / M² / SEC)

Water absorption test in accordance to BS 1881 : Part 122 as below :

Concrete Grade	40
Cement Content	420kg
Water Cement Ratio	0.38

	<i>Dosage of Polycrete Admix</i>	<i>Water Absorption (%)</i>
Treated	1.0	< 1.8
Control	nil	5.9

WATERPROOFING TO CONCRETE JOINTS

PVC Waterstop shall be provided between lifts of concrete and in floor joints.

PRECAUTION

Polycrete Admix does not contain any hazardous substances requiring labeling. It is safe for use with standard precautions followed in the construction industry, such as use of hand glove, safety goggles, etc.

PACKAGING AND SHELF LIFE

Available in 20 litre pail / 205 litre drum.

Can be stored for 12-months at temperatures above 5°C in tightly sealed original drums. If found to be frozen, thaw it and reconstitute by stirring.