

POLYKOTE

CRYSTALLINE CAPILLARY WATERPROOFING SYSTEM

DESCRIPTION

In the presence of moisture, the active chemically in **Polykote** Crystalline penetrate concrete and react chemically with free lime to produce insoluble crystals. This crystalline growth reduces porosity by blocking capillaries and filling hairline non-structural cracks (up to 0.5mm wide) caused by shrinkage or expansion. Unlike coating and membrane types of waterproofing, which only form a surface barrier. In the presence of water, **Polykote** Crystalline continues producing crystals and a lasting imperviousness to water.

POLYKOTE Crystalline has been tested by SIRIM QAS International Sdn. Bhd. in accordance to BS 1881-122 : 1983 on Water Absorption Test BS 6920, on the suitability for contact with drinking water and complied with the specification in this data sheet.

STANDARD COMPLIANCE

- ✓ BS 1881-122:1983
- ✓ BS 6920 : Part 1 : 2000

OUTSTANDING FEATURES

- Cost effective and easy to apply.
- Contains No chloride.
- Penetrates concrete, seals capillary tracts and hairline cracks.
- Effective treatment for hydrostatic conditions.
- Resist chemical attacks for sewage and industrial waste.
- Resists de-icing salts.
- Exterior and interior applications.

TYPICAL USES

Polykote Crystalline is specially formulated for the waterproofing on Retaining Walls, Nuclear Power Plants, Tanks, Tunnels, Foundations, Control Rooms, Subway Tunnels, Swimming Pools, Industrial Plants, Office Building Foundation, Parking Decks, Basement Floors and Walls

PHYSICAL PROPERTIES

Water Absorption Test BS 1881-122 : 1983	< 0.22 %
Potable Condition BS 6920 : Part 1 : 2000	Complied

COVERAGE

Dry Shake	1.1kg/m ² 18m ² per 20kg bag
Slurry Coat	1.0kg/m ² 20m ² /coat per 20kg bag

PACKAGING AND STORAGE

Available in 20kg bag.

Store in protected, dry areas.

Polykote Crystalline has a shelf life of (6)-months in original unopened package.

APPLICATION INSTRUCTION

- a) **Dry shakes for treatment to basement slab**
Polykote Crystalline can be dry sprinkled into clean and pre-wetted lean concrete at the rate of 1.10kg/m² immediately prior to the casting of the structural slabs.
- b) **Dry shakes for newly poured concrete**
Wearing rubber gloves, distribute the powder evenly by hand over freshly poured concrete at the rate of 1.22–1.35kg/m² before final floating operation. It is best to distribute the powder at ½ of the recommended rate in one direction, and the other half at right angle to the first application. Keep hand as close as possible to the surface during dry shakes process.
For large areas, a rotary type of spreader may be used. Float slab and trowel to final finish.
- c) **Slurry coat for existing concrete**
Mixing (Slurry coat) - One-part of clean water shall mix Three-Parts of powder. Add the clean water into **Polykote** Crystalline. Mix thoroughly with a slow speed drill equipped with a paddle. For larger batches, mix with a mortar mixer.
Do not mix excessive material that can be used in 20 minutes. (24°C, 50% R.H.) If mixture thickens, restir to reduce consistency.
Do Not Add Extra Water.
- d) **Application by brush or roller**
Application by brush or roller must be undertaken with the maximum attention to uniformly covering the whole surface in (2)-layers coating.
For areas with high water ingress, apply third-coat at 1.0kg/m².

CURING AND PROTECTION

Keep moist for a minimum of 24-hours after the application of **Polykote** Crystalline. After initial set, moist curing by continuous water spray. Treated surfaces shall be fog sprayed three to four times daily for 48-hours. For warmer climates, more frequent spraying may be required. It is important to keep **Polykote** Crystalline moist to allow the crystal formation to occur. Use **Polycure** curing compound for the curing purpose. Protect surface from foot traffic for 48-hours or heavy traffic for 7-days. Protect **Polykote** Crystalline from extreme weather conditions such as rain, strong winds, high temperatures and freezing for a period of not less than 48-hours after application.

PRECAUTION

Polykote Crystalline is alkaline and contain chemicals that may cause irritation to the eyes and skin. Wear goggles, rubber gloves and long sleeves when working with this product.

Seek medical advice in the event of prolong irritation.