

POLYALK EPG

CO-POLYMER FOR R.C.C. REPAIRS, BONDING AND GROUTING

DESCRIPTION

POLYALK EPG strengthens the microstructure of cement based hydrated products by forming a polymeric spatial network in its voids, complementing the cement paste characteristics. The resultant composite improves tensile and flexural properties and also a modified pore system of very low porosity and permeability. This versatile co-polymer dispersion is in a liquid form. It is suitable for repair mortars, grouts, rendering, floor screeds etc. It effectively resists carbonation.

USES

- Repair of RCC members, water tanks, and industrial floors.
- Grouting of RCC members.
- Finishing plaster for brick and block work.
- Heritage structure rehabilitation.
- Staircase steps retrofitting.
- Foundation grouting.
- Pipe joints new and repaired.

ADVANTAGES

- POLYALK EPG increases interfacial adhesion, impermeability, tensile strength and flexural strength.
- Compensates for volume changes due to shrinkage.

PROPERTIES

- Tensile strength 28 days : Increase by 50 to 60%
- Flexural strength 28 days : Increase by 60 to 90%

- Pull out strength : Increase by 100%
- Resistance to Carbonation : Good
- Adhesion : Good
- Chemical Resistance : Good (Mild acids, alkalies, sulphates, sugars)

INSTRUCTIONS FOR USE

POLYMER CEMENT BONDING COAT (PCBC)

- Clean the surface on which the bonding coat is to be applied with a water jet approximately 24 hrs prior to application.
- Mix thoroughly 0.5 part fresh cement with 1 part POLYALK EP (by weight) using a mechanical mixer. Slurry of a consistency easily applicable by brush is ready for use as a bonding material.
- In special cases, this composition may be modified by consulting CMCD.
- Apply the bonding coat on the cleaned RCC surface by brush taking care to avoid pinholes.
- Immediately after application of the slurry on the requisite surface, place the next screed or mortar etc. that is to come over it "wet on wet" application.

Note: Do not use any water in preparing the slurry. Use OPC cement only.

COVERAGE

- For Bonding coat 3.5 to 4 M² per Kg.

POLYMER MODIFIED CEMENT MORTAR (PMCM)

- 1 Kg POLYALK EPG, 5 Kg fresh cement, 15 Kg quartz sand (graded). (Polymer: Cement: Quartz Sand ratio is 1:5:15) is a globally recommended

composition. However, the proportion can be modified based on consultant's recommendations.

- First dry mix the cement and graded sand in a mixer.
- Mix POLYALK EPG with the premixed cement-sand in the mixer using a mechanical stirrer (A mechanical mixer with a specially designed stirrer may be used).
- Mix for 3 minutes. Add requisite quantity of water to attain dough like consistency so that it can be hand packed. The mortar is now ready for use.

POLYALK EPG as POLYMER RICH CEMENT MORTAR (PRCM)

- 2 Kg POLYALK EPG, 5 Kg fresh cement and 15 graded quartz sand (i.e. in the ratio of 2:5:15) is the recommended composition.
- Mix the three ingredients (do not add any water) preferably in a mechanical mixer, till a soft mix of uniform consistency is formed.
- A mix with this proportion has the required strength and flexibility suitable for filling cracks effectively.

YIELD

- For Mortars 21-22 Kg mix yields 0.01 M³ or 10 Litre approximately.

POLYALK EP as POLYMER CEMENT GROUT (PCG)

- 1 Kg POLYALK EPG, 3 Kg fresh cement and 2 Kg water (i.e. in the ratio of 1:3:2) is the recommended composition.
- Mix POLYALK EPG and water. Add this to cement using a mechanical mixer till slurry of uniform consistency is formed.

- Depending upon various needs of grout application, the above proportion of POLYALK EPG may be modified by consulting CMCD.

CURING

- 24 hours after application, cure by a fine spray of water for at least seven days.

PRECAUTIONS

- Prepare only as much quantity as can be used in 30 minutes.
- Use fresh cement.
- Clean all tools with water immediately after use.

PACKING

- 1, 5, 20 Kg.

STORAGE & SHELF LIFE

- 12 months when stored in a cool & dry place, away from direct sunlight, in original sealed packing

DISCLAIMER

This information is accurate and reliable to the best of the knowledge. It is meant as a guideline only. Sunanda Speciality Coatings Pvt. Ltd. (SSCPL) cannot give any guarantees under any circumstances for the results, or assume any obligation or liability in connection with the use of this information. It is recommended that the product be tested to determine its suitability for specific applications. Since, SSCPL has no control over how others may use its products; it is recommended that the Specifier, Architect, Engineer, Contractor and Owner assume all the responsibilities in connection therewith.