PolyAgent EP

High-Performance Epoxy Bonding Agent

Description

PolyAgent EP is a premium-grade, two-component, solvent-free epoxy bonding agent specifically formulated to provide a permanent structural bond between hardened concrete and freshly placed concrete. Manufactured from high-quality epoxy resins and specially selected curing agents, it delivers outstanding adhesion, superior mechanical performance, and exceptional long-term durability.

Its moisture-tolerant formulation allows application on damp concrete substrates, making it ideal for structural repairs, concrete extensions, construction joints, and reinstatement works.

Technical Properties

Appearance	Liquid Resin
Solid Content	100%
Density	1.25 Kg/l
Adhesion Strength	≥3.5 N/mm²
Compressive Strength	≥70 N/mm² (7 days)
Tensile Strength	~ 45 N/mm²
Slant Shear Strength	~ 15 N/mm²
Pot Life (25°C)	~ 60 min
Fully Curing	7 Days
Consumption	7 M^2/L

All values are nominal and subject to a tolerance of ± 5-10%

Key Features

- High structural bond strength
- Solvent-free formulation
- Moisture tolerant
- Excellent mechanical properties
- High impact resistance
- Non-shrink performance
- Chemical resistant
- Excellent water resistance

Area Of Use

- Bonding fresh concrete to hardened concrete
- Structural concrete repairs
- Construction and cold joints
- Concrete extensions and casting continuity
- Repair of industrial floors
- Bonding concrete to steel
- Crack sealing and screed repairs
- Bridges, roads, loading bays, factories, and other heavy-duty structures

Packaging

PolyInject EP is available in:
4 Liters Kit

Storage

Keep the product in dry and sheltered place at temperature between +5ºC to +35ºC. In these conditions and in closed original containers, the product will have a shelf life of at least 12 months.

Standard Compliance

- ASTM C881 type IV, grade 2 class C
- ASTM D695, D638, D570, C579
- BS 6319 Pt 2

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Application Procedure

Surface Preparation

All substrates shall be structurally sound, clean, and free from dust, laitance, oil, grease, curing compounds, release agents, loose particles, paint, waterproofing materials, and any contaminants that may impair adhesion.

Concrete surfaces should be mechanically prepared by grinding, grit blasting, scabbling, or wire brushing to expose a clean, sound substrate.

Remove all dust using oil-free compressed air or clean water. Oil and grease contamination should be removed using an appropriate degreasing solvent.

Any biological growth should be completely removed and treated with a suitable fungicidal solution prior to application.

Mixing Procedure

PolyAgent EP is supplied as a pre-measured two-component system. Before mixing, stir each component separately.

Pour the entire contents of the hardener into the resin container and mix thoroughly using a low-speed electric mixer (300–500 rpm) fitted with a suitable mixing paddle until a smooth, uniform, and homogeneous consistency is achieved.

Do not split the components or alter the mixing ratio. Mix only complete units.

Application Instruction

Apply PolyAgent EP uniformly using a brush, roller, or rubber squeegee to the prepared substrate.

On porous concrete, work the material well into the surface to ensure complete penetration. Where the substrate absorbs the resin completely, apply an additional coat to achieve a continuous bonding film.

Fresh concrete, repair mortars, or cementitious toppings should be placed while the epoxy remains tacky.

Do not apply concrete over fully cured or tack-free epoxy.

If the bonding coat has cured before overlay placement, a fresh coat of PolyAgent EP should be applied before continuing the work.

Quality & Care

All products provided by PolyCrete are manufactured under a management system certified to conform to the requirements of the quality and environmental health & safety standards ISO 9001, ISO 14001 & ISO 45001.

Health & Safety

Wear gloves, goggles to avoid any contact with eyes and skin. In case of splashes in the eyes wash abundantly with warm water and consult a doctor. For further information or particular use, contact PolyCrete Technical Department.

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