PRODUCT DATASHEET

PlekoBond EP 14

PRODUCT DESCRIPTION

PlekoBond EP14 is a high-performance, solvent-free epoxy bonding agent designed for versatile use across a wide range of applications. With an extended pot life, it offers excellent workability and strong adhesion to most construction substrates following proper surface preparation. **PlekoBond EP14** can be applied on both dry and damp surfaces, making it an ideal choice for challenging site conditions and reliable structural bonding.

USES

PlekoBond EP14 is ideal for various structural bonding applications, including:

- Grouting of dowels
- Bonding steel elements
- Connecting new concrete to existing concrete surfaces.

Its strong adhesive properties and versatility make it suitable for demanding repair and reinforcement works across different substrates.

PACKAGING

1 Kg and 3Kg kits

COVERAGE

For Priming, **PlekoBond EP14** provides coverage of approximately 2 to 2.7 m² per kilogram, depending on the texture and profile of the concrete surface.

PROPERTIES

- **Solvent-free formulation ensures low VOC emissions and eliminates shrinkage for durable, long-lasting performance.**
- **Excellent abrasion and chemical resistance make it suitable for use as a wearing surface in aggressive environments.**
- **Pre-measured packaging simplifies mixing and minimizes the risk of errors during application.**
- **Bonds effectively to damp and wet surfaces, allowing for use in a wide range of site conditions.**
- **Low viscosity provides easy application and excellent penetration when used as a primer.**
- **Versatile multi-purpose binder suitable for numerous construction and repair applications.**

TECHNICAL DATA

Property	Value
Supply Form Part A	Liquid (Grey color)
Supply Form Part B	Liquid (Amber color)
Mixed Form	Viscous Liquid (Grey color)
Mix Ratio	83:17 pbw
Mix Density	1.48 Kg/L
Application Temperature	15 °C – 35 °C
Compressive Strength @ 23 °C	65 MPa @ 7 days
Tensile Strength @ 23 °C	25 MPa @ 7 days
Mixed Viscosity @ 25 °C	2450 ± 450 cps
Pot Life	2 hrs @ 25 °C
	1 hr @ 40 °C
Recoat time	8 hrs @ 25 °C
	6 hrs @ 40 °C
Slant shear Bond strength (BS 6319 part 4)	>11 MPa (concrete failure)
Bond strength (ASTM D4541)	>2.5 MPa (Concrete Failure)
Setting time	150 minutes @ 25°C
Meets the requirements of ASTM C881 Type 2 Grade 2 Class B & C	

CHEMICAL RESISTANCE

PlekoBond EP14 offers reliable resistance to a wide range of diluted organic and inorganic acids, as well as alkalis, water, oils, grease, and other common industrial substances. The level of chemical resistance depends on factors such as the specific chemicals involved, their concentration, temperature, and duration of exposure. To maximize the product's service life, good maintenance

practices, such as prompt cleaning of spills, are strongly recommended.

INSTALLATION

SUBSTRATE PREPARATION

Ensure all surfaces are clean and free from grease, oil, dust, curing compounds, form release agents, or any other contaminants that may hinder adhesion. Any laitance should ideally be removed using light sweep blasting or hydro-jetting. For smaller areas, mechanical wire brushing may be sufficient. Damaged or spalled concrete must be cut back to sound material, and the area repaired and filled using **PlekoBond EP14** mortar.

Any traditional concrete curing compounds must be thoroughly removed before application to ensure optimal bonding.

MIXING

Start by thoroughly stirring Part A to ensure uniform consistency. Then add Part B and mix both components together using a slow-speed drill fitted with an appropriate mixing paddle. Continue blending until a smooth, homogeneous mixture is achieved. Avoid incorporating air during mixing for best results.

APPLICATION

PlekoBond EP14 should be applied evenly over the prepared surface using a brush or roller. Ensure full coverage across the entire area. If multiple coats are required, they should be applied within 30–45 minutes while the previous layer remains tacky. When bonding fresh concrete, it is essential to place the new concrete onto a tacky layer of **PlekoBond EP14**. If the surface loses tackiness, a fresh coat must be reapplied to ensure proper adhesion

CURING

Curing time for **PlekoBond EP14** depends on factors such as ambient temperature, the volume mixed, and the amount applied. Under standard conditions (23°C), the product reaches full cure within 7 days. Warmer or cooler temperatures may accelerate or delay the curing process accordingly.

STORAGE

PlekoBond EP14 should be stored in its original, tightly sealed containers in a cool, dry, and well-ventilated area. When kept under moderate temperature conditions, the product remains stable and usable for up to 12 months from the date of manufacture

HEALTH AND SAFETY

For complete information on health, safety hazards, and guidance on the safe handling and use of **PlekoBond EP14**, please refer to the Material Safety Data Sheet (MSDS).