

HEGGEL® Pox 486

Low-Emission Medium-Viscosity Epoxy Resin

You Build, We Protect!

Description:

HEGGEL Pox 486 is an unfilled, two-component special epoxy resin with medium viscosity and very low emission. The resin can be used as primer, key coat and binder for mortars. It is highly versatile, mixing effectively with various dry fillers such as quartz sand, quartz powder, basaltic grit, hard aggregates, granite or silicon carbide depending on the use.

Characteristics:

- Approved for protection against rising damp
- Inert and harmless when cured
- Exceptional chemical resistance
- Outstanding mechanical resistance

Applications:

HEGGEL Pox 486 is designed for concrete surfaces where rising damp is expected. It is ideal for industrial areas and public buildings like schools, hospitals, kindergartens, shopping malls, and other indoor areas with high requirements to room climate. The resin meets the strictest criteria for low emissions of indoor air pollutants.

Application Data:

Mixing Ratio (Parts by Weight)	A : B = 100 : 50 (2 : 1)		
Colour	Clear		
Number of Coat	2		
Consumption	0.4 - 0.5 kg/m ² (per coat) Sprinkle with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m ²)		
@Temperature	12°C	23°C	30°C
Pot Life	60 min	40 min	20 min
Duration between Applications (If sprinkled with quartz sand, the duration will increase)	min. 16 hrs max. 36 hrs	min. 8 hrs max. 24 hrs	min. 8 hrs max. 24 hrs
First Contact with Water	-	after 24 hrs	-
Curing Time (Foot Traffic)	36 hrs	24 hrs	18 hrs
Curing Time (Mechanical Load)	96 hrs	72 hrs	48 hrs
Curing Time (Chemical Load)	8 days	6 days	5 days

Note: All above values are approximate and may be used as a guideline for specifications

Technical Data:

Title	Standard	Value
Density (Mix)	@23°C	Approx. 1.10 g/cm ³
Solids Content	-	Approx. 100 %
Viscosity (Mix)	@23°C	Approx. 750 ± 100 mPa.s
Compressive Strength	DIN EN ISO 604	60 - 100 MPa (depending on filler ratio)
Tensile Strength	DIN EN ISO 178	30 MPa
Water Absorption	-	< 1.5 %
Temperature Resistance	-	Wet (short-term): Max. 60°C Dry: Max. 80°C

Packaging:

- 25 kg - pails (16.66 kg part A + 8.34 kg part B)
- 200 kg - barrel (2 x 200 kg part A + 1 x 200 kg part B)
- 1000 kg - container

Storage:

12 months, sealed in original containers under dry conditions and a temperature of 15 - 25°C. Crystallization may occur at temperatures below 10°C. Please consult HEGGEL!
Protect from heat and freeze!

1. Surface Preparation

Before application, the substrate must be prepared mechanically using qualified equipment of shot blasting or high-pressure water jetting. The substrate must meet the following minimum requirements: it should be free of cement laitance, dust, oil, fat, and other contaminants, have an open textured and absorbent surface, a pull-off strength of at least 1.5 N/mm², and a concrete residual moisture content of no more than 6%.

2. Environment Conditions

Before, during, and after application, the substrate temperature must be at least 3°C above the current dew point and should range between 12°C and 30°C. Additionally, ensure that the relative humidity is below 75% at 12°C and below 85% at temperatures above 23°C throughout surface preparation, application, and curing processes.

3. Application Tools

- Rubber squeegee
- Paint-roller
- Notched trowel
- Scraper

4. Mixing

Before mixing, ensure the components' temperature is between 15°C and 25°C. Mix the components in the correct ratio using a suitable low-speed electric mixer (300-400 rpm) for at least 3 minutes, or until a completely homogeneous mixture is achieved. Transfer the mixed material into a clean container and mix for an additional minute. Once mixed, gradually add fillers while stirring constantly.

5. Application

Distribute the thoroughly mixed and homogeneous mixture onto the surface immediately. Depending on the condition of the substrate, we recommend applying a

primer and a key coat, or a filled primer. Use a rubber squeegee to spread the primer evenly, then finish with a paint roller. The key coat (1:0.8 up to 1:1 w/w) and the filled primer (1:1 up to 1:2 w/w) can be formulated using **HEGGEL Pox 486** and clean, dry, tempered quartz sand. Apply the mixture with a notched trowel or scraper. The applied coating should be lightly sprinkled with clean, dry quartz sand (Ø 0.4-0.8 mm, approximately 0.5 kg/m²).

Primer: approx. 0.4 - 0.5 kg/m².

Key Coat: 1: 0.8 up to 1: 1 filled with clean, dry quartz sand Ø 0.1 - 0.3 mm.

Consumption: approx. 0.75 kg/m² resin plus clean, dry quartz sand.

Damp Concrete:

Damp concrete surfaces must be free of standing water. Ensure that there is no water on the surface or in the pores of the concrete. For concrete substrates with evident rising damp, always apply a second coat of **HEGGEL Pox 486**.

6. System Description

The following figures apply to ambient and surface temperatures between 15°C and 23°C. Both higher and lower temperatures will affect the filler ratio and consumption per square meter. **HEGGEL Pox 486** is versatile and commonly used in various applications, including:

Primer / Seal Coat:

As a primer, apply **HEGGEL Pox 486** at approximately 0.4 - 0.5 kg/m² and lightly sprinkle the surface with clean, dry quartz sand (Ø 0.4 - 0.8 mm, approximately 0.5 kg/m²). After curing, seal the surface with a second coat of **HEGGEL Pox 486** without adding quartz sand.

Consumption: approx. 0.4 - 0.5 kg/m².

Primer / Key Coat:

As a primer, apply **HEGGEL Pox 486** at approximately 0.4 - 0.5 kg/m² and lightly

sprinkle the surface with clean, dry quartz sand (Ø 0.4 - 0.8 mm, approximately 0.5 kg/m²). Depending on the substrate conditions, apply an additional primer or a key coat with **HEGGEL Pox 486** and lightly sprinkle the surface again with clean, dry quartz sand (Ø 0.4 - 0.8 mm, approximately 0.5 kg/m²). Once cured, any subsequent coating system can be applied.

Note: Priming and sealing should only be performed at constant or falling temperatures to prevent blistering and leakage. The choice of fillers depends on the product's usage and anticipated wear and tear.

Note: UV radiation can cause discoloration.

7. Safety Measures

The material safety data sheets of the individual components, the safety instructions on the packing (label) as well as the legal requirements for handling hazardous materials must be observed.

Note: Wear appropriate protective clothing, gloves, and eye/face protection. Ensure the working area is adequately ventilated. If the resin comes into contact with skin, wash immediately with plenty of water and soap. In case of eye contact, rinse thoroughly with plenty of water and seek medical advice. Do not eat, drink, or smoke while using the product, and keep it away from sources of ignition.

8. EU Directive ("Decopaint-RL"):

Acc. to the EU Directive 2004/42/EG the maximum allowed content of VOC (Product category All / j / type SB) is 500 g/L (Limit 2010) for the ready to use product. This product is in accordance with the EU Directive 2010.

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All information contained herein is based on the current state of our knowledge and practical experience at the time of release. Therefore, please make sure that this is the latest edition of the Technical Data Sheet. All data are only intended as a guideline for informational purposes and do not constitute a legally-binding warranty of the suitability for a certain purpose of use, due to its dependence on site conditions and possible processing, use and applications. All information contained in this technical datasheet is subject to change without notice.

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