HEGGEL® Pox 415

Rapid-Setting Epoxy Resin

You Build, We Protect!

Description:

HEGGEL Pox 415 is a two-component, solvent-free epoxy resin, setting at lower temperatures and rapid-setting at regular temperatures. Suitable for base coats and levelling coats where a speedy return for subsequent coatings is needed.

HEGGEL Pox 415 may usually be accessed after only 2 - 4 hours for subsequent coating work. Therefore, the material offers a considerable time advantage against other base coats. The time advantage of **HEGGEL Pox 415** is especially considerable on small areas and for reconstruction with a small-time frame for fitting and curing.

HEGGEL Pox 415 cures even at lower temperatures above 0°C dependably, which is beneficial during the cold season.

Characteristics:

- High solid content
- Rapid-setting
- Fast curing for resuming work
- Time-saving
- Very fast accessible
- Resistant to hydrolysis and saponification
- Free of deleterious substances against varnish

Applications:

- Rapid-setting base coat and scratch coats before subsequent coating work.
- Scratch coat for pore sealing and levelling.
- When used in combination with **HEGGEL Pox 420** accessible after 48 hours.
- Cures at temperatures above 0°C.

Application Data:

Mixing Ratio	**Parts by Weight** **Parts by Volume**	A : B = 100 : 40 A : B = 100 : 43		
Processing Temperature		Minimum 10°C (Room -and floor- temperature) Curing up to 0°C (Room -and floor- temperature)		
Further Coatings		After curing, but not longer than 48 hours at 20°C		
Consumption	**Base Coat**	Approx. 0.3 - 0.4 kg/m²		
	Scratch Coat	Approx. 0.4 - 0.6 kg/m²		
	Mortar	Approx. 0.150 - 0.300 kg/m² for each mm of layer		
	@Temperature	**10°C**	**20°C**	**30°C**
Curing Time	**Accessibility**	4 – 8 hrs	2 - 3 hrs	2 hrs
	Mechanical Load	-	10 - 20 hrs	-
	Chemical Load	-	3 days	-
Processing Time		30 min	15 min	10 min

Technical Data:

Title	Standard	Value	Unit
Viscosity (Components A + B)	DIN EN ISO 3219 (23°C)	900	mPas
Solid Content	HEGGEL-Method	> 99	Weight %
Density (Components A + B)	DIN EN ISO 2811-2 (20°C)	1.09	kg/L
Weight Loss	After 28 days	0.3	Weight %
Water Absorption	DIN 53495	< 0.2	Weight %
Bending Tensile Strength	DIN EN 196/1	> 25	N/mm²
Compressive Strength	DIN EN 196/1	> 70	N/mm²
Shore-Hardness D	DIN 53505 (after 7 days)	85	-
Adhesive Tensile Strength	DIN EN ISO 1542	> 1.5	N/mm²

Note: Values achieved in sampling are average values. Variation in product specification is possible.

Packaging:

Hobbock-Combi 30 kg

Storage:

12 months in sealed original containers under dry and cool conditions between 10 - 20 °C. Bring to a suitable working temperature before application. Tightly re-seal opened containers and use the content as soon as possible.

Protect from heat and freeze!

1. Surface Preparation

The substrate to be coated has to be levelled, dry, free of dust, has to have adequate tensile and compressive strength, and be free from weakly-bonded components or surfaces. Materials impairing adhesion, such as grease, oil, and paint residues must be removed using suitable methods. Suitable surfaces are concrete C20/25 (B 25), cement screed CT-C35-F5 (ZE 30), as well as other adequately sound surfaces. The substrate has to have adequately high strength for the proposed occupational use. Coating of mastic asphalt with epoxy resin is not recommended. The surface to be coated should be prepared mechanically, preferably by shot-blasting. The surface strength must then be a minimum of 1.5 N/mm^2. For concrete, moisture content must not exceed 4.5 CM%, remaining residual humidity. The possibility of moisture ingress from the rear must be permanently excluded. Reconstructing floors may need special procedures. Obtain technical advice.

2. Mixing

Single packages of the components need to be measured in the precise mixing ratio. Combi-trading units will be supplied in the correctly measured mixing ratio. Component A has sufficient volume for the entire trading unit. Decant the hardener completely into the resin. Blend with a slow speed mixer (200 - 400 rpm) for at least 2 - 3 minutes, for a material that is homogeneous and free of streaks. To avoid mixing errors it is recommended to empty the resin / hardener mixture into a clean container and mix briefly once again ("to repot"). Reconstruction beyond the regular requirements demands a monitoring of the result, e.g. by conducting a tensile bonding test.

Producing scratch coats and mortar:

Scratch Coats:

1.0 kg **HEGGEL Pox 415**

0.5 - 0.8 kg **HEGGEL quartz sand-mix 2/1**

Epoxy Resin Mortar:

1.0 kg **HEGGEL Pox 415**

8.0 - 12.0 kg **HEGGEL quartz sand-mix 1**

Before adding additives, premix the binding agent, then add the additive. The amount of the sand blend to be added depends on the desired texture and consistency.

Note: Processing rapid-setting mortars is quite difficult. Our recommendation is for small area repair work.

3. Processing / Handling

Base Coat: Processing the material as a base coat takes place immediately after mixing, using a coating knife, trowel, or nylon roller. Apply an evenly closed coat on the substrate. On highly absorbent surfaces, a second coat or a saturated scratch coat is recommended to achieve a compact surface. For optimum adhesion scatter the fresh surface with quartz sand (grain size 0.3 / 0.8 mm). This is mandatory if the subsequent coatings will be applied later than 18 hours after base coat application.

Scratch Coat: For smoothing the substrate, as well as pore sealing apply a scratch coat. Use a trowel, metal, or rubber coating knife. The consistency has to be adjusted according to the absorbency of the substrate, and set so the material may run true.

Priming Filler: Base coat and the smoothing coat may be applied simultaneously. It just has to be assured that a sufficient sealing coat for subsequent coatings is achieved. Usually, prime filling coats may be filled with 0.5 kg of **HEGGEL quartz sand-mix 2/1.** Apply with a rubber coating knife, with a consumption of 0.7 - 1.0 kg/m^2, depending on the depth of roughness of the substrate.

Epoxy Resin Mortar: HEGGEL Pox 415 may be used as mortar for repair work. Use the special resin **HEGGEL Pox 480** for industrial mortar coatings. Process immediately after mixing. Pull off with a lath, compact and smooth with a smoothing trowel. Processing temperature should not fall below 5 °C.

During curing floor -and air- temperature must not fall below 0 °C, and humidity must not exceed 75%. Very often a high temperature change causes dew-point situations, which may lead to disturbances in curing. Curing time applies to 20 °C. Lower temperature may increase, higher temperature may decrease the curing and processing time.

Special Remarks: We advise against the "gumming" of screed joints / flat joints with pure or with thixotropic agent filled epoxy resin. In the course of time, these areas will begin to show on the surface. For the application, use always the HEGGEL-Primer resin in combination with quartz sand e.g. **HEGGEL quartz sand-mix 1** or **HEGGEL quartz sand-mix 2/1.** For this, we recommend to add at least 1 - 3 parts by weight of filler.

4. Cleaning

To remove fresh contamination and to clean tools, use **Cleaner V20 or V30** immediately. Hardened material can only be removed mechanically.

5. Safety Measures

The product is subject to the hazardous material, operational safety, and transport-regulations for hazardous goods. Refer to the DIN-Safety Data Sheet and the information on the labelled containers!

GISCODE (05/2018 modification): RE 55

6. Indication of VOC-Content

(EG-Regulation 2004/42)

Maximum Permissible Value 500 g/L (2010,II,j/lb): Ready-for-use product contains < 500 g/L VOC.

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