HEGGEL[®] Pox 425

Self-levelling Epoxy Resin Based Coating for WHG Applications



You Build, We Protect!

Description:

HEGGEL Pox 425 is a two-component crack-bridging and self-levelling epoxy coating for WHG applications used in HEGGEL flooring system.

Characteristics:

- High chemical resistance
- Resistant to hydrolysis and saponification
- Crack-bridging (0.3 mm)
- Self-Levelling
- · Resistant to fluid penetration
- Very good mechanical specifications
- Free from harmful to varnish substances
- Suitable for forklift traffic
- VOC < 500 g/l

Application Areas:

HEGGEL Pox 425 is suitable for use in collection drains and areas such as HBV facilities (production, treatment, or processing operations) and LAU installations (storage, filling, and handling of water-hazardous substances), where Water Resources Act (WHG) coating systems are required.

Application Data:

m ²		
m ²		
~ 2.4 – 2.6 kg/m ²		
20 °C	30 °C	
~ 20 min	~ 10 min	
14 - 18 hrs	10 - 14 hrs	
23 °C	30 °C	
2 - 3 days	-	
7 days	5 days	
	20 °C ~ 20 min 14 - 18 hrs 23 °C 2 - 3 days 7 days	

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

Technical Data:

Title	Standard	Value
Solids Content	-	~ 99%
Density (Mix) @23°C	-	~ 1.6 g/cm ³
Viscosity (Mix)	DIN EN ISO 3219	~ 2,600 ± 300 mPa.s
Shore D - Hardness	DIN 53505	65 (After 7 days)
Abrasion Resistance	ASTM D4060 (Taber /CS10 /1kg /1000 rev.)	50 mg weight loss
Water Absorption	-	< 0.2%
Weight Loss		0.3% (After 28 days)

Packaging:

30 kg Hobbock (24 kg part A + 6 kg part B) Other packaging available on request.

Storage:

12 months, sealed in original containers under dry conditions and a temperature of 15 - 25 °C. Reseal opened packages tightly and use the contents promptly. Protect from heat and freeze.

1. Surface Preparation

Before application, the substrate must be prepared using qualified methods of shot blasting. The substrate must meet the following minimum requirements: It should be free of slurry, dust, oil, grease, and other adhesion-impairing contaminants. It must have an absorbent surface and a pull-off strength of at least 1.5 MPa. The concrete residual moisture content should be no more than 4%.

The substrate must be prepared to a nonporous condition by applying a primer and an intermediate coat (scratch coat) using **HEGGEL Pox 495**.

2. Environment Conditions

Before, during, and after application, the substrate temperature must be at least 3°C above the current dew point and should be minimum 10 °C. Additionally, ensure that the relative humidity is below 75% throughout surface preparation, application, and curing processes.

3. Application Tools

- Trowel
- Paint roller

4. Mixing

Before mixing, ensure that all components are at a temperature at least 15 °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 and uniform mixture is achieved. Then, transfer the mixed material into a clean container and mix for an additional minute.

5. Application

Immediately distribute the prepared mixture onto the surface.

The **HEGGEL Pox 425** coating system, consisting of **HEGGEL Pox 495** (used as primer and intermediate coat) and **HEGGEL Pox 425**, provides crack-bridging performance up to 0.2 mm when modified with up to 2% thixotropic agent, and up to 0.3 mm without the additive. On vertical or inclined surfaces, a thixotropic agent (up to 2%) may be added to the topcoat.

6. System Description

The following information is valid for substrate and floor temperatures in the range of $15 \,^{\circ}$ C to $23 \,^{\circ}$ C. Both higher and lower temperatures will affect the filler ratio, consumption per square meter.

Primer:

HEGGEL Pox 495, Transparent Consumption: ~ 0.3 - 0.4 kg/m²

Intermediate Coat (Scratch Coat):

HEGGEL Pox 495 + quartz sand mixture in ratio of 1: 0.8 (parts by weight)

Note: Mixture consists of quartz powder (< 0.06 mm) and quartz sand (0.06 - 0.3 mm) in a mixing ratio of 1:1.4.

Consumption: ~ 0.45 kg/m²

After curing, the surface can be finished with 2.4 - 2.6 kg/m² **HEGGEL Pox 425**.

7. Chemical Resistance

Chemical resistance has been verified for the following media groups, including fuels, hydrocarbons, alcohols, acids, alkalis, and organic solvents:

- Heating oils
- Diesel fuels
- Hydrocarbons and benzene-containing mixtures
- Benzene
- Alcohols and glycol ethers
- Aromatic halocarbons
- Organic esters and ketones
- Aliphatic aldehydes
- Aqueous solutions of organic acids up to 10% and their salts
- Organic acids >10% and their salts
- Mineral acids up to 20% and acidhydrolyzing salts
- Inorganic alkalis and alkaline-hydrolyzing salts
- Aqueous solutions of inorganic nonoxidizing salts (pH 6 - 8)
- Amines and their salts in aqueous solution
- Aqueous solutions of organic surfactants
- Acyclic ethers
- Phosphoric acid 60%
- Nitric acid 15%

8. Safety Measures

Avoid inhaling vapours and prevent contact with skin. Wear appropriate protective clothing, gloves, and eye / face protection. Ensure adequate ventilation in the working area. In case of skin contact, wash immediately with plenty of soap and water. If contact occurs with the eyes, rinse thoroughly with plenty of water and seek medical attention. Do not eat, drink, or smoke while using the product, and keep away from sources of ignition.

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.

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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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