

# HEGSEL Pox 422

Chemical resistant, 2-component epoxy resin coating

**Description:**

**HEGSEL Pox 422** is a solvent-free, 2-component epoxy resin flow coating with increased chemical resistance.

The cured coating is suitable for commercially and industrially used areas with an increased demand to chemical resistance. Application is suitable for many industrially and commercially used areas where the focus is on the resistance of the coating.

**HEGSEL Pox 422** offers good resistance to chemicals, like e.g. alkalis, oil, grease, water, salt-solutions, and different acids. To ensure the suitability for your demand please note the resistance-chart and seek technical advice.

If explosion prevention is needed, the electrically conductive product **HEGSEL Pox 460** offers an alternative.

**Characteristics:**

- High-quality compounds
- Good chemical resistance
- Good resistance to solvents
- Solvent-free
- Resistant to hydrolysis and saponification
- Pale, pigmented surface
- Wear and tear-resistant

**Application:**

- Smooth coating for areas with an increased demand to chemical resistance.
- For commercially and industrially used areas.
- By scattering different slip-resistance grade are producible.

**Technical data:**

Mixing ratio	Parts by weight Parts by volume	A : B = 100 : 25 A : B = 100 : 41
Processing time:	Temperature Time	10 °C / 50 °F 20 °C / 68 °F 30 °C / 86 °F 40 minutes 20 minutes 10 minutes
Processing temperature		Minimum 10 °C / 50 °F - Maximum 30 °C / 86 °F (room- and floor-temperature)
Curing time (Accessibility):	Temperature Time	10 °C / 50 °F 20 °C / 68 °F 30 °C / 86 °F 24 - 36 hrs. 14 - 18 hrs. 10 - 14 hrs.
Curing		2 - 3 days for mechanical load at 20 °C / 68 °F 7 days for chemical resistance at 20 °C / 68 °F
Further coatings		After 14 - 18 hours, but not longer than 48 hours at 20 °C / 68 °F
Consistency		Filling consistency
Consumption		Approx. 2.5 - 4.0 kg/m <sup>2</sup>
Thickness of layers		1.5 - 2.5 mm
Addition of quartz sand		Not recommended
Packaging		Hobbock-Combi 30 kg
Colours		Colours upon request!
Shelf life		12 months (originally sealed)

## 1. Build-up of Coats

- Prepare the substrate e.g. by shot-blasting.
- Prime with **HEGGEL Pox 410**. Apply the freshly mixed material with a coating knife or trowel, re-roll, consumption approx. 0.3 - 0.4 kg/m<sup>2</sup>.
- Apply a scratch coat with **HEGGEL Pox 410** and **HEGGEL quartz sand-mix 2/1** (mixing ratio: 1.0 : 0.8 parts by weight). Use a coating knife or trowel to get a levelled thickness, consumption of mixture approx. 0.5 - 1.0 kg/m<sup>2</sup>.
- If required, concave or triangular coverings may now be inserted. Produce these, using **HEGGEL Pox 468** and **HEGGEL quartz sand-mix 1**, mixing ratio 1 : 5 parts by weight.
- After 18 hours but not longer than 48 hours the coating **HEGGEL Pox 422** will be applied. Process the material immediately after mixing with a coating knife or notched trowel. Apply an even layer, consumption approx. 2.5 - 3.4 kg/m<sup>2</sup>. The product is adjusted with an optimum of air venting. To upgrade the wettability of the substrate, optimize the flow-properties, and remove any air blows, it is recommended to re-work with a spiked roller, time-delayed after 10 -15 minutes. Divide working areas before starting work. Always work "fresh-in-fresh" to avoid any shoulders.

## 2. Substrate

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. Please refer to the product information for the recommended HEGGEL-Base Coats, like e.g. **HEGGEL Pox 410**, **HEGGEL Pox 411**, **HEGGEL Pox 412**, or **HEGGEL Pox 415**. The

surface to be coated should be prepared mechanically, preferably by shot-blasting. The prepared surface has to be primed accurately, saturated, and free of pores. Estimating the substrate according to the necessary sealed state may be difficult, so a scratch coat is recommended for smoothing the surface. If the substrate hasn't been sealed completely, bubbles and pores may appear because of rising air. Conduct a trial if in doubt. To increase adhesion scatter the surface with approx. 0.5 - 1.0 kg/m<sup>2</sup> quartz sand, grain size 0.3/0.8 mm.

## 3. Mixing

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 compound B into the resin component A completely. Blend with a slow speed mixer (200 - 400 r/pm) for at least 2 - 3 minutes, for a material that is homogeneous and free of streaks. To avoid mixing errors it is recommended to principally empty the resin/hardener mixture into a clean container and mix briefly once again ("to repot").

## 4. Processing / Handling

Process the material with a coating knife or trowel right after mixing by applying an even layer on the prepared substrate. The product is adjusted with an optimum of air venting. To upgrade the moistening of the substrate, optimizing the flow-properties, and removing any air blows, it is recommended to roll with a spiked roller. Using the spiked roller should be carried out time-delayed – after 10 - 15 minutes. Divide working areas before starting work and always work "fresh-in-fresh" to avoid any shoulders. Scattering conductive coatings is not recommended because conductivity will be reduced.

Floor- and air-temperature must not fall below 10 °C / 50 °F and humidity must not

exceed 75 %. The material to be processed has to have room temperature. The difference in dew-point temperature and floor-temperature must be less than 3 °C / 37.4 °F during processing and curing. If a dew-point situation occurs curing may be disturbed and spotting may occur. Avoid exposure to water and chemicals within the first 7 days. Curing time applies to 20 °C / 68 °F. Lower temperature may increase; higher temperature may decrease the curing and processing time. Comply with the recommended processing conditions. If working conditions are not complied with, deviations in the described technical properties may occur in the end product.

## 5. Cleaning

To remove fresh contamination and to clean tools use **Cleaner V20** or **V40** immediately. Hardened material can only be removed mechanically.

## 6. Storage

Store in dry and at frost-free conditions. Ideal storage temperature is between 10 - 20 °C / 50 - 68 °F. Bring to a suitable working temperature before application. Tightly re-seal opened containers and use the content as soon as possible.

## 7. Special Remarks

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 labelled on the containers!

GISCODE: RE 1

### 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.

**Technical Data\***

Viscosity	Components A + B	2800 - 3200	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid contents		> 99.8	%	
Density	Components A + B	1.59	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Weight loss		0.3	weight-%	(after 28 days)
Water absorption		< 0.2	weight-%	DIN 53515
Shore-hardness D		69	-	DIN 53505 (7 days)
Abrasion (Taber Abraser)		55	mg	ASTM D4060

(\*Values achieved in sampling are average values. Variation in product specification is possible.)

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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 actual 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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