# HEGGEL Pox 473

Coloured, flexibilised 2-component epoxy resin top sealer for car park surface protection systems

*Empowered by Expertise!*

**Description:**

**HEGGEL Pox 473** is a flexible, coloured, 2-component epoxy resin top sealer for drivable scattered coatings for indoor car parks and garages.

**HEGGEL Pox 473** is suitable for application on scattered, flexibilised surface protection systems (OS 11a/b). The top sealer is prepared with low viscosity for good processability and demonstrates good covering power. Top sealing of sanded surfaces results in a slip-resistant and wear-resistant floor coating.

**HEGGEL Pox 473** is resistant to water and de-icing salts, glycols and battery acids.

Alternatively, **HEGGEL Flex 545** can be used as a light-resistant top sealer variant for surface protection systems (OS 11a/b).

**Characteristics:**

- Drivable
- Resistant to abrasion
- Flexibilised
- Resistant to permanent moisture
- Slip-resistant
- Resistant to de-icing salts
- Resistant to glycol, oil and battery acid

**Application:**

- Flexibilised top sealer for the surface protection systems OS 11 a/b
- For indoor car parks, garages, etc.

**Technical data:**

| | | | | |
|---|---|---|---|---|
| Mixing ratio | Parts by weight | A : B = | 5 : 1 | |
| | Parts by volume | A : B = | 100 : 32 | |
| Processing time | Temperature | 10 °C / 50 °F | 20 °C / 68 °F | 30 °C / 86 °F |
| | Time | 60 - 80 min. | 30 – 40 min | 10 - 15 min |
| Processing temperature | | Minimum 10 °C / 50 °F (room and floor temperature) | | |
| Curing time (Accessibility) | Temperature | 10 °C / 50 °F | 20 °C / 68 °F | 30 °C / 86 °F |
| | Time | 24 - 36 hrs. | 14 - 18 hrs. | 10 - 14 hrs. |
| Curing | | 2 - 3 days for mechanical loading capacity at 20 °C / 68 °F<br>7 days for chemical loading capacity at 20 °C / 68 °F | | |
| Further coatings | | After 14 - 18 hours, but no longer than 48 hours at 20 °C / 68 °F | | |
| Consumption | | Approx. 0.6 - 0.9 kg/m² | | |
| Packaging | | Hobbock combi 30 kg | | |
| Colours | | Colours available upon request! | | |
| Shelf life | | 12 months (originally sealed) | | |

## 1. Build-up of Coats

Surface protection system in accordance with DAfStb guideline OS 11a

*Coating with improved, dynamic crack-bridging ability for walkable and drivable areas, as well as open decks*

- Prepare the substrate, preferably using shot blasting, and thoroughly vacuum off.
- Prime using **HEGGEL Pox 484,** consumption approx. 0.3 - 0.4 kg/m². Open sanding using quartz sand, grain size 0.3/0.8 mm, consumption approx. 0.5 - 1.0 kg/m².
- Alternatively, **HEGGEL Pox 488,** consumption approx. 0.3 - 0.6 kg/m² can be used as a pre-filled primer. Open sanding using quartz sand, grain size 0.3/0.8 mm or 0.7/1.2 mm, consumption approx. 0.5 - 1.0 kg/m².
- Apply the floating layer with **HEGGEL Flex 540** using toothed rake, consumption approx. 2.0 - 2.3 kg/m².

*Relevant layer thickness aggregates are required for roughness depths in accordance with the maintenance guidelines.*

- Fill the **HEGGEL Flex 544** wear coat with approx. 20 % quartz sand of grain size 0.1/0.3 mm and mix until homogeneous.
- Apply the **HEGGEL Flex 544** wearing surface using the toothed rake, consumption approx. 2.2 - 2.5 kg/m².

*Relevant layer thickness aggregates are required for roughness depths in accordance with the maintenance guidelines.*

- Scatter the entire surface with quartz sand with a grain size of 0.3/0.8 mm, consumption approx. 4 - 6 kg/m².
- Remove surplus sand after hardening, brush off loose grains and thoroughly vacuum off the entire surface.
- For weathered surfaces, the non-yellowing **HEGGEL Flex 545** top sealer, consumption approx. 0.6 - 0.9 kg/m², is applied using an expanded rubber wiper and uniformly distributed in criss-cross strokes using a velour roller.
- Alternatively, the flexibilised **HEGGEL Pox 473** top sealer, consumption approx. 0.6 - 0.9 kg/m² can be applied.

Important notes:

- The maintenance guidelines require compliance with the layer thicknesses for attaining the certified properties, such as crack-bridging in class IIT-V.
- A minimum layer thickness of 1.5 mm for the flexible surface protection (floating layer) and of 3.0 mm plus the current roughness depth layer thickness aggregate for the wearing surface is required for OS 11a.
- Only the OS 11a structure may be used on exposed parking decks.
- Please observe the maintenance guidelines for further requirements.

Surface protection system in accordance with DAfStb guideline OS 11b

*Coating with improved, dynamic crack-bridging ability for walkable and drivable areas*

- Prepare the substrate, preferably using shot blasting, and thoroughly vacuum off.
- Prime using **HEGGEL Pox 484,** consumption approx. 0.3 - 0.4 kg/m². Open sanding using quartz sand, grain size 0.3/0.8 mm, consumption approx. 0.5 - 1.0 kg/m².
- Optional if surface roughness has to be levelled: Scratch coat with an **HEGGEL Pox 484** compound: **HEGGEL quartz sand-mix 2/1,** mixing ratio (A + B): Mixing sand = 1 : (0.5 - 0.8) parts by weight.
- Consumption: 0.8 - 1.2 kg/m².
- Alternatively, **HEGGEL Pox 488,** consumption approx. 0.3 - 0.6 kg/m² can be used as a pre-filled primer.
- Apply the **HEGGEL Flex 540** floating layer using the toothed rake. Consumption approx. 2.8 - 3.2 kg/m² of the mixture. For OS 11b, the **HEGGEL Flex 540** floating layer is mixed with 30 % quartz sand, grain size 0.1/0.3 mm, until homogeneous.
- Relevant layer thickness aggregates are required for roughness depths in accordance with the maintenance guidelines.
- Cover the entire surface of the fresh coat with quartz sand with a grain size of 0.3/0.8 mm, consumption approx. 4 - 6 kg/m². Remove excess sand after curing, brush off loose grains and thoroughly vacuum off entire surface.
- Apply the coloured, flexibilised **HEGGEL Pox 473** top sealer using a rubber spatula /expanded rubber wiper or a scraper, consumption approx. 0.6 - 0.9 kg/m².
- Use a nylon roller after a time delay of approx. 10 - 20 minutes to achieve a uniform surface.

Important notes:

- The maintenance guidelines require compliance with the layer thicknesses for attaining the certified properties, such as crack-bridging in class IIT-V.
- A minimum layer thickness of 4.0 mm plus the current roughness depth layer thickness aggregate is required for OS 11b.
- The OS 11b composition is not allowed to be used on exposed parking decks.
- Please observe the maintenance guidelines for further requirements.

## 2. Substrate

The substrate to be sealed must be free from all kinds of soiling. The product is usually used on quartz scattered surfaces. Excess quartz sand must be swept off, brushed off or vacuumed up so that no loose grains are left.

The following applies in general for coating systems:

The substrate to be coated must be even, dry, dust-free, sufficiently resistant to tension and compression, and free from weakly bonded components or surfaces. Materials impairing adhesion such as grease, oil and traces of paint should be removed using suitable measures. Please refer to the notes in the product information of the recommended primers **HEGGEL Pox 484** or **HEGGEL Pox 488.** The substrates which are to be coated must be mechanically prepared, preferably using shot blasting. The prepared area must be primed carefully and in a saturated and pore-free way. If the substrate has not been primed to be pore-free, blisters and pores can appear in the coating as a result of the air rising from the substrate. When in doubt, a test area is recommended. The surface is scattered with approx. 1.0 - 2.0 kg/m² quartz sand with a grain size of 0.3/0.8 mm to improve adhesion.

## 3. Mixing

For combi-packaging, a ready mix contains the factory- weighed material at exactly the right mixing ratio. Component A's packaging has sufficient volume to hold the entire quantity. Empty Component B completely into the resin packaging. Mixing is carried out mechanically using a slow speed mixer (200 - 400 rpm) for 2 - 3 minutes until a homogeneous, streak-free compound is obtained. To avoid mixing errors, it is recommended to empty the resin/hardener compound into a clean container ("to repot") and then briefly mix it again.

## 4. Processing

After the base coat has cured, the surface of the scattered coating must be cleaned of excess grains by sweeping and vacuuming until no more quartz grains are left.

Then pour the fresh mixture onto the floor in portions.

The compound is then distributed using a smooth rubber squeegee, expanded rubber slider, scraper or steel squeegee, depending on the desired quantity of material, by evenly pulling it over the sanded surface. Ensure uniform application and avoid ponding. Rigid squeegees result in smoother road surfaces, soft rubber squeegees result in rougher road surfaces. Slip resistance requirements must comply with the recommended consumption levels for the

respective R class. Please seek advice if required.

In order to even out the surface and to avoid balding, the surface should be gone over with a velour roller after 10 - 20 minutes depending on the temperature.

The floor and air temperature should not be lower than 10 °C / 50 °F and the air humidity should not exceed 75 %. The difference between the floor and room temperatures should be less than 3 °C / 37.4 °F so that curing is not disturbed. If a dew-point situation occurs, normal curing cannot take place and spotting may occur. Water loading should be avoided during the first 7 days. The specified curing times apply for 20 °C / 68 °F: At lower temperatures the processing and curing times will increase and decrease at higher temperatures. If the processing requirements are not observed, then the end product's technical properties may deviate from description (surface and load-bearing capacity).

## 5. Cleaning

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

## 6. Storage

Store in a dry location if possible, protect against frost. Ideal storage temperature 10 - 20 °C / 50 - 68 °F. Bring to the correct processing temperature before applying. Tightly seal opened packaging and consume as soon as possible.

## 7. Special Remarks

The product is subject to the hazardous material regulation, operational safety regulation and the transport regulation for hazardous goods. Refer to DIN safety data sheet and the information on the container label!

GISCODE (modification 05/2018): RE 30

**VOC content labelling:**

(EU Regulation 2004/42)

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

## Technical Data*

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|---|---|---|---|---|
| Viscosity | Components A + B | 1800 | mPas | DIN EN ISO 3219 (23 °C / 73.4 °F) |
| Solids content | | 99 | % | HEGGEL method |
| Density | Components A + B | 1.49 | kg/l | DIN EN ISO 2811-2 (20 °C / 68 °F) |
| Compressive strength | | > 55 | N/mm² | DIN EN 196/1 |
| Shore-hardness D | | 80 | - | DIN 53505 (after 7 days) |
| Water absorption | | < 0.2 | weight-% | DIN 53495 |
| Abrasion (Taber Abraser) | | approx. 60 | mg | ASTM D4060 |

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





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