



## TECHNICAL DATA SHEET Page 1/2

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TPOX 5° is tested, low emission and meets the requirements of LEED v4 MRc 2 (Option 1): Building Product Disclosure and Optimization - Environmental Product Declaration, LEED v4 MRc 4 (Option 2): Construction Product Declaration and Optimization - Material Ingredients, and LEED v 4 EQc 2: Low-Emission Materials.

Thanks to the thixotropic flow properties of TpoX 5°, the resin is a thin fluid when being applied in order to properly saturate the substrate. After the application (or cross-coating using a paint roller etc.), the viscosity will increase which serves to prevent the formation of sediments on substrate roughness.

### APPLICATION AREA

- As bonding bridge for force-fit connections of concrete, bonded screed as well as cement indoor and outdoor substrates as of +5 °C
- Barrier against rising, non-pressing moisture up to  $\leq 4$  CM% for cementitious substrates, 4 - 6 CM% with non-porous application of 0.5 kg/m<sup>2</sup> for cementitious substrates;  $\leq 0.5$  CM% for anhydrite screeds
- Also suitable as crack resin

### PROPERTIES

- Concrete and screed floors are well fortified in the surface thanks to very good wetting of mineral substrates
- Very good adhesion to wood, metals, mineral building materials etc. (impurities must be removed)
- Very good wetting and adhesion properties, also on cement substrates moistened rearward

### MIXING PROCESS

- Add component B (curing agent) completely to mix with component A (resin). Please make sure that component B is discharged completely. Mix thoroughly using a slow mixer and be sure to include the edge and floor of the mixing container as well. The mixing process must be carried on until the mixture is free of streaks and homogeneous. Then refill the mixed material into a clean container and mix again for approx. 1 minute

### SUBSTRATE PREPARATION

- The substrate must be prepared pursuant to the common standards and the state of technology. It must be capable of bearing loads, free of oil and grease as well as dust and separating agents
- For cementitious substrates with non-pressing moisture up to  $\leq 4$  CM%; 4 - 6 CM% for cementitious substrates with pore-free application of at least 0.5 kg/m<sup>2</sup>;  $\leq 0.5$  CM% for anhydrite screeds. Please ensure that there is no visible water pooling.
- For combination structures, the minimum requirement for the following static load is  $\geq 1.0$  N/mm<sup>2</sup> and for dynamic loads  $\geq 1.5$  N/mm<sup>2</sup>

### PROCESSING INFORMATION AS BONDING BRIDGE

- Individual components can separate in the container during storage. This leads to no loss in performance. By stirring properly or stirring in the hardener, the components mix completely again.
- Mix TpoX 5° and then apply evenly onto the pretreated substrate. It is generally recommended to immediately distribute the mixed material on the surface, through this the processing time significantly increases. Install screed fresh in fresh as long as the bonding bridge is still sticky. If TpoX 5° loses adhesion, apply another fresh layer of TpoX 5°. TpoX 5° is applied using a rubber slider or notched squeegee and paint roller in cross-coating pattern, depending on the roughness of the substrate
- Consumption depending on the substrate roughness, from 0.35 kg/m<sup>2</sup>

### PROCESSING INFORMATION AS PRIMING/BARRIER FOR MOIST SUBSTRATES TO MAX. 5 %

- Individual components can separate in the container during storage. This leads to no loss in performance. By stirring properly or stirring in the hardener, the components mix completely again.
- TpoX 5° may be used as barrier coat against rising moisture (no pressing moisture) under all moisture-sensitive top surfaces, such as PVC, parquet, etc. TpoX 5° must be applied in two separate work steps. The minimum time between first and second application is 12 hours, the max. is 48 hours. In order to be able to work in combination, the second priming coat must be sprinkled over the complete area with fire-dried quartz sand, for example with a grain of 0.3/0.4-0.8 mm (approx. 3 kg/m<sup>2</sup>). After the curing process, excess sand must be swept up and vacuumed.
- Consumption depending on the substrate roughness  
First coat (barrier coat) from 0.35 kg/m<sup>2</sup>  
Second coat from 0.3 kg/m<sup>2</sup>

**TPOX 5°**HIGH-PERFORMANCE  
COMPOUND RESIN

## PRODUCT DATA

- Form of delivery: 12 kg net (10.05 kg "A" and 1.95 kg "B")
- Storage conditions: dry, cool, free of frost in original closed containers
- Density at 23 °C: approx. 1.47 g/cm<sup>3</sup>
- Mixing ratio: mass share A:B = 8.37:1.63 (≈ 5.1:1)
- Not UV-stable (will turn yellow)

## TECHNICAL DATA

- During the application and curing process, the substrate temperature must be at least +3 °C above the dewpoint temperature. Protect from bedewling!
- Surface adhesion primer/moisture barrier after 7 days on fresh screed at 100 % screed-concrete break
- Temperature resistance: permanently +50 °C (short-term up to 80 °C)
- Air temperature: min. +5 °C, max. 30 °C
- Substrate temperature: min. +5 °C, max. 30 °C
- Relative humidity: max. 80 %
- Adhesive tensile strength: combined after 3 days at 100 % screed-concrete break
- Pot life: 10 °C in approx. 25 min  
20 °C in approx. 15 min  
30 °C in approx. 8 min

## SAFETY INFORMATION

- When processing epoxy resins and curing agents, the general cautionary measures applicable when handling chemicals must be observed, especially BG regulation 227 "Activities involving epoxy resin" (Publisher: Employer's Liability Insurance Associations of the Chemical Industry)
- Causes severe skin burns and eye damage. May cause allergic skin reactions. Harmful if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Avoid contact with eyes and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of contact with skin, rinse thoroughly with soap and water. Wear suitable protective gloves and eye/face protection. Use only in well ventilated areas. Keep out of the reach of children. Further information on the safe use of our products can be found in the safety data sheet.
- TPOX 5° is accelerated epoxy resin, it can rise to over 100 °C in a short time at 20 °C! If the material remains in the container without being processed, it will start heating up and start to smoke.

## DISPOSAL

- Do not allow product residues to enter drains, water courses or the ground. Drip-free or completely empty containers are recyclable. Containers with uncured product and uncured product residues are to be treated as hazardous waste. Containers with cured residual contents are construction waste. Product residues should therefore always be cured and disposed as construction waste. The local guidelines for disposal must be observed.

## CLEANING

- TPOX 5° can be removed when fresh using a diluent. Once it has cured, it can only be mechanically removed.

## PRODUCT ONLY FOR PROFESSIONAL APPLICATIONS!

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Our information is based on our current experiences and developments thus we take warranty for the flawless quality of our products. We cannot assume responsibility for the success of the work carried out by you, as no legal liability can be derived due to different construction site conditions, laying techniques and construction work. We recommend creating a trial area for individual situations. Moreover, our General Terms and Conditions apply. With the publication of this technical data sheet, any previous versions are no longer valid.

**Color:** Comp. A brownish-transparent / Comp. B transparent

**Form:** liquid

**Form of delivery:** metal containers 12 kg net

**Shelf life:** min. 18 months after production date if stored properly

**Processing temperature:** above +5 °C to +30 °C

**Storage conditions:** In unopened, intact original containers, dry, at temperatures ranging from +5 °C and +30 °C