

TECHNICAL DATA SHEET

porfil.[®] PLUS X

transparent

Epoxy resin impregnation / barrier primer



Product description:

porfil.[®] PLUS X is a solvent-free, durable, pore-filling, very low-viscosity 2-component epoxy resin impregnation for optimizing the readiness of concrete and screeds for covering. Also usable as epoxy resin mortar and binder for the design of innovative **porviva[®]** design surfaces.

Applications:

Curing

- of screed and green concrete
- reduction of plastic shrinkage cracks due to early drying out
- deformation behaviour is reduced

Pore filling primer

- protects from rear surface moisture
- seals resistant to pressurised water
- mechanical parameters such as abrasion resistance and adhesive pull strength are improved

Epoxy mortar

- low material consumption

Fixing binder

- for fixing **porviva[®]** particles „**players. porbits[®]**“

Product properties and further information:

package size in kg:	10,00 kg (Comp. A: 8,00 kg + Comp. B: 2,00 kg)
package content in liters:	Comp. A: 7,20 Liter, Comp. B: 2,15 Liter
packing art:	Comp. A: 12 L Tinplate bucket, Comp. B: 2,5 L Canister
packaging type:	Comp. A: 1A2 (Barrel), Comp. B: Canister with UN-approval
Gut/ Gefahrgut:	Comp. A: UN 3082, Class 9, Packaging group III ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin MG<700) Comp. B: UN 2735, Class 8, Packaging group III AMINE, LIQUID, CORROSIVE, N.O.S. (ISOPHORONDIAMINE mixture)
VOC-Content g/L):	delivery condition: Comp. A < 0, Comp. B < 0
paletting:	300 kg per palett (30x Comp. A and B)
GISCODE:	RE1
UFI CODE:	Comp. A YEN3-S0JE-J00G-N2P7 Comp. B 5MV5-Q0VD-E00C-T7C7
Storability:	Well-closed and unmixed containers must be stored in a dry and air-conditioned place in the temperature range from 15 up to 23 °C. Avoid direct sunlight and storage temperatures below the specified limits. The material is at risk of frost!
Shelf life:	Under the conditions specified above, the material can be stored for approx. 24 months. There is no guarantee for the shelf life of opened containers. The material should be used immediately after opening.

following product information can be required by E-Mail or phone:

- technical data sheet
- safety data sheet
- **porviva[®]** cleaning- and maintenance instruction

PRODUCT VARIANTS:

- TRANSPARENT

AREAS OF APPLICATION:

- AIRPORTS
- INDUSTRIAL FLOORING
- COMMERCIAL PREMISES
- OFFICE SPACE
- PRIVATE HOUSING
- PARKING DECKS, UNDERGROUND PARKING LOTS ETC.
- WATER AND LEISURE PARKS

SUBFLOORS:

- CONCRETE
- SCREED
- CEMENTITIOUS FILLERS
- PORVIVA[®] SYSTEM SURFACES

PROPERTIES:

- SOLVENT FREE
- LONG LASTING
- LOW MATERIAL CONSUMPTION
- EASY TO CLEAN
- EASY TO REPAIR
- PROTECTION AGAINST BACKSIDE MOISTURE PENETRATION

PORVIVA GMBH

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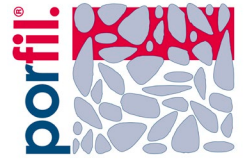
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Consumption:

ca. 0,100 - 0,400 kg/ m²

Consumption will vary **according to the surface texture and porosity**, but should be in the range of 0,100 - 0,300 kg/m². The above consumption figures are intended as a guide only and may be higher on very rough or porous substrates. Therefore a test application is recommended to define the object-specific material consumption.

Mixing ratio by weight:

100 parts component A
25 parts component B

Surface preparation:

The correct preparation of the substrate is of paramount importance. **The substrate must be load-bearing, form stable, sound, free of loose material, dust, oil grease, rubber marks and other substances which may impair penetration.** The tensile strength on the surface of the substrate must be **1,5 N/mm² on average, compressive strength at least 25 N/mm².**

Any **laitance, mould release agents, curing membrane and other contaminants** present on the surface must be removed mechanically. Shot blasting and surface grinding followed by vacuum cleaning or high pressure water jetting are the preferred methods. **Missing and broken out areas in the substrate should be filled/closed flush with the surface by adequate means (e.g.: Epoxy mortar).**

Epoxy mortar:

porfil.® PLUS X may be **mixed with siliceous sand** to the desired consistency (mixing ratio **porfil.® PLUS X: sand up to 1:20 by weight**) to repair patches or form coverings. In either case the mixed mortar must be applied to a surface previously cured with **porfil.® PLUS X** and the mortar must be incorporated into the still tacky **porfil.® PLUS X**.

Mixing:

porfil.® PLUS X is supplied in the correct ratio of component A (resin) and component B (hardener). The temperature of the two components should be between **15 and 25 °C** during the mixing process.

Open the bucket of Comp. A, then add the canister of Comp. B completely. Allow the hardener to completely into the lower bucket. **DO NOT MIX BY HAND.**

To achieve a homogeneous consistency and intensive mixing, mix the two components should be thoroughly mixed at low speeds (**approx. 300 rpm**) using a **cordless drill** with stirring attachment. The bottom and edge areas of the mixing vessel must also be covered. The mixing process must be carried out until the material is homogeneous and free of streaks, but for at least 3 minutes.

Do not process material from the delivery container! After thorough mixing, repot into a second clean container and mix again for approx. 3 minutes. Quartz sand is added to the premixed binder under constant stirring if required (epoxy mortar).

Application:

Before application on absorbent substrates a waterdroptest should be carried out. A waterdrop set on the surface has to spread and must be absorbed into the substrate after 1-2 minutes.

Put on water drops and wait...



The waterdrops must penetrate the substrate within a short time and dry up damp, as shown in **picture no. 2**.

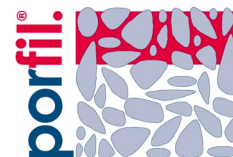
porfil.® PLUS X is poured onto the prepared substrate and spread with a squeegee (rubber lip). **ALLOW TO CURE!** After a short operating time (**minimum: 30 minutes**) a **second application step** is carried out. On very porous substrates a further application step may be required (the surface becomes light grey again, showing absorption). Re-prime the dry areas and allow to cure again. The epoxy excess must be spreaded crosswise on the surface with a laquer roller to fix siliceous sand (0,4-0,8mm) (perfect bonding capabilities for coverings) or **pleyers. porbits®** in the still tacky **porfil.® PLUS X**. The curing time of the material is influenced by the ambient material and substrate temperatures. At **low temperatures, the chemical reactions are slowed down**, this lengthens the pot-life, open time and curing times. **High temperatures speed up the chemical reactions** thus the time frames mentioned above are shortened accordingly. **To fully cure, the material, substrate and application temperatures should not fall below the minimum.**

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Application time:

Pot life will vary according to the ambient and substrate temperatures. The mixed material will have a pot life of approximately 30 minutes at 20°C.

	+ 12°C	+ 20°C	+ 30°C	+ 50°C
In container ≤ 2 kg	ca. 45 minutes	ca. 30 minutes	ca. 15 minutes	ca. 8 minutes
Poured out	ca. 60 minutes	ca. 45 minutes	ca. 30 minutes	ca. 15 minutes

The local bodies, for example environmental protection agency or commercial control office, have a duty to disclose information therein.

Cleaning:

Tools must be cleaned immediately after use with a solvent such as isopropanol or other suitable solvents. Cured material can only be removed mechanically.

Others:

Delivery only for commercial or industrial use.

Curing:

Cure time will vary depending on the ambient and substrate temperatures. **porfil.[®] PLUS X** will cure to a tack free surface within 24 hours at 20°C. In any case, sample surfaces must be laid out to determine compatibility.

Overcoating:

A **porfil.[®] PLUS X** primed surface must be treated as a **non-absorbing substrate** and can be coated with suitable paintings, coatings or floor covering adhesives. To define the compatibility, samples have to be applied first.

Precaution /Waste disposal:

Hazardous material regulations: mark-duty. For the handling of **porfil.[®] PLUS X** the important physical, safety-related, toxic and ecological data have to be extracted from the safety-data-sheet. The instructions for hazardous material handling should be followed. The product information and safety advices on the containers as well as the individual accident prevention regulations from the responsible employees' insurance during the application are to be noticed. In the uncured condition **porfil.[®] PLUS X** is as a rule hazardous to water and is therefore not allowed to get into the sewerage, water and ground. Uncured quantities of this product are as a rule special wastes needing monitoring and must be disposed properly. After the agreement of the relevant responsible body or waste disposal, cured material can be disposed as house-/industrial waste.

The above information, in particular the suggestions for processing and use of this product, are based on our knowledge and experience under normal circumstances. However, they remain non-binding. Due to the different materials, substrates and deviating working conditions, a warranty of a work result or a liability, from whatever legal relationship, can neither be justified from these instructions, nor from a verbal consultation, unless we are charged with intent or gross negligence in this respect. In this respect, the user must prove that he has provided us in writing with all the knowledge required for a proper and promising assessment in good time and in full. Industrial property rights of third parties are to be observed. In all other respects, our respective terms and conditions of sale and delivery shall apply. The latest technical data sheet shall apply and should be requested from us by phone: +49 (2407) 568 303-0 or by e-mail: office@porviva.com.