Technical Data Sheet

PT Epoxy-Resin

- universal usable epoxy resin -
(transparent, unfilled, medium viscosity)

Product description

PT Epoxy-Resin is a two component, transparent, unfilled, medium viscous and free of nonylphenol epoxy resin. Due to the special formulation it is universal usable and can be filled with quarz sand in a high ratio.

_____

Application areas

PT Epoxy-Resin is suitable as a primer, key coat and binder for mortars. The resin offers universal use as it mixes well with a wide range of dry fillers i. e. quartz sand, quartz powder, basaltic grit, hard aggregates, granite, silicon carbide or colored quartz sand.

_____

Product advantages
- **Two Components**
- **Primer, key coat and mortar resin**
- **High chemical resistance**
- **High mechanical resistance**
- **Easy to apply**
- **Medium viscous**
- **Low yellowing**
- **Mixing ratio 2:1 by weight**
- **Suitable on many surfaces**
- **„Made in Germany"**

_____

Specification

Base	: epoxy resin
Color	
Component A	: transparent
Component B	: transparent
Processing temperature	: > + 11°C up to + 30°C surface temperature
Density (23°C)	: approx.1,12 g/ml
Viscosity (23°C)	: approx. 650 mPas
Solid content	: 100%
Compressive strength (EN ISO 604)	: approx. 61-85 N/mm² after 14 days at 23°C / filler ratio
Tensile strength (DIN EN ISO 178)	: approx. 30 N/mm²
Volume shrinkage	: < 1%
Adhesion tensile strength on concrete	: concrete fracture
Adhesion tensile strength on steel	: > 15 N/mm² (14 days, 23°C)

Technical Data Sheet

Mixing ratio	: 2:1 by weight
Pot life	: 11°C approx. 60 minutes
	23°C approx. 40 minutes
	30°C approx. 20 minutes
Consumption	: 0.3-0.5 kg as a primer, as mortar depend of filling ratio

All technical datas are measured in our laboraty.

Please take notice about the safety information and advice given on the safety data sheets and packaging labels. GISCODE: RE1

_____

Delivery form

6 kg unit
(comp. A 4 kg + comp. B 2 kg)   Article-No. 10200006

_____

Storage

12 months (frost-free and dry, +5°C up to +25°C in original packaging).

_____

Application

Preparation of the surface
The surface must be mineral, dry or slight moist (concrete residual moisture max. 4%), stable, solid and clean. Loose components, release agents, formwork oil, grease and other adhesive reducing layers have to be removed before the use of PT Epoxy-Resin. The concrete should be 3-7 weeks old before application. Damaged areas, cracks, cavities can be re-profiled with PT Epoxy-Resin + quarz sand. Perhaps a pretreatment of the surface with sand or shotblasting is necessary. An adhesive tensile strength of 1,5 N/mm² at least is required.

_____

Material
Prior to mixing, the temperature of the components must be between minimum 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 mixture has been achieved. Put the mixed material into a clean container and mix again for at least 1 minute. After mixing, fillers can be added whilst stirring constantly. Distribute the mixture immediately onto the surface. Depending on the condition of the substrate we recommend applying a primer and a key coat or a filled primer. Use a rubber squeegee to spread the primer evenly and finish with a paint-roller. The key coat (1 : 0.8 up to 1 : 1 w/w) and the filled primer (1 : 1 up to 1 : 2.5 w/w) can be formulated using PT Epoxy-Resin and clean, dry, tempered quartz sand.

The mixture should be applied by notched trowel or scraper. The applied coating must always be lightly sprinkled with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²). Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

Primer: approx. 0.3 - 0.5 kg/m².
Key coat: 1 : 0.8 up to 1 : 1 filled with clean, dry quartz sand Ø 0.1 - 0.3 mm.
Consumption: approx. 0.75 kg/m² resin plus clean, dry quartz sand.

Special System description

The following figures are for ambient and surface temperatures of 15 - 23°C. Both high and low temperatures will influence the filler ratio and the consumption per m². PT Epoxy-Resin can be used in various ways. The most common applications are:

Colored broadcast flooring:

Apply a coating of PT Epoxy-Resin approx. 1:1.5 filled with clean, dry quartz sand and broadcast the surface to excess with colored quartz sand. Once cured, remove the excess sand and carefully abrade the surface using a grinder that is equipped with a carborundum paper disc. Afterwards, thoroughly clean the surface with an industrial vacuum cleaner. Finally apply a sealer / topcoat using PT Epoxy-Resin.

Intermediate coat:

PT Epoxy-Resin + quartz sand
Consumption: approx. 1.5 kg/m² resin plus clean, dry quartz sand.
Consumption: Colored quartz sand to broadcast the surface approx. 5 kg/m².

Sealer / topcoat:

PT Epoxy-Resin
Consumption: approx. 0.6 - 1.0 kg/m², depend on grain size and roughness.

Epoxy screed / mortar:

The use of the product and the expected wear and tear will determine the choice of fillers.
E. g. 10 mm, impervious EP - mortar:
approx. 1:7 filled with Silimix 282.

Please note: UV radiation cause discoloration.

_____

Recommended tools:

Mixing device, spatula, notched trowel, gloves, safety glasses

_____

Application areas:

Remarks