

Solvent-free, Low Viscosity Epoxy Resin

Description

PENTENS E-500 is resistant to high mechanical loads thanks to its strong surface and wear and tear resistance. This makes it an economical solution for mechanically loaded areas.

Uses

- Binding resin for self-leveling epoxy resin
- Production of light duty to heavy duty resin screed systems
- Suitable for Low Pressure Epoxy Injection System. Injection resin for dry, static cracks between 1-2 mm in width
- Bonding coat for epoxy repair system, work with carbon fiber sheet

Advantages

- Very good adhesion on mineral substrates, can be highly filled with mineral aggregates.
- Self-leveling even when filled with up to 3 parts PENTENS AG-9 filler.
- Produces high strength mortars with high resistances to rolling and abrasive loadings, filled with up to 10 parts PENTENS AG-3 filler.
- High chemical resistance.
- Primer on mineral based substrates prior to application of solvent-free coatings and screeds.

Technical & Physical Data

Density (mixture)	approx. 1.10g/cm ³
Viscosity	approx. 500-600mPas
Mixing ratio	3:1
Pot life	1 hour
Resistance to foot traffic	after 24 hours
Full mechanical and chemical resistance	after 7 days
Hardness (Shore D)	> 81
Compressive strength	> 85 N/mm ²
Flexural strength	> 325 N/mm ²
Tensile strength	> 50 N/mm ²
Elongation at break	2%
Minimum application conditions	8~30°C substrate temperature, < 85% rel. humidity, 3K above dew point
Storage (not mixed)	Can be stored in original sealed packs under cool and dry conditions for at least 12 months.
Disposal	in order to maintain workability. In interest of our environment please empty packs completely
Packaging	E-500A: 15kg/pail E-500B: 5kg/pail

* Pentens E-500 complies with ASTM C-881 Type I & II, Grade 1, Class B & C



Instruction for Use

Surface preparation

The substrate must be sound, dry, clean and free from all loose particles, dust, cement laitance, oil and other contaminants.

Mixing

PENTENS E-500 consists of a base and a hardener component supplied in prebatched packs. Before application, the base and the hardener components are carefully mixed by means of a slow rotating electric drill with paddle. To complete the mixing, the resin is poured from one can to another and mixed again. Mineral aggregates are mixed with the binding resin by means of a forced action mixer. To ensure the correct mixing ration and for ecological reasons packs should be emptied thoroughly.

Application

Application of PENTENS E-500 as a primer is normally by means of rubber squeegees or rolling. The fresh primer cannot be over coated within the next 24 hours.

Self-leveling screeds made from PENTENS E-500/AG-3 mixtures are applied by means of steel trowels floats or rubber squeegees on top of the primed surface. To obtain higher anti-skid scratch coats or self-leveling screeds they have to be strewn immediately with oven-dried quartz sand.

PENTENS E-500 can be supplied as PENTENS E-30 for use at low temperatures (+5°C) respectively for quicker hardening.

Cleaning

Tools and equipment just can be clean with thinner immediately after use.

Safety

Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. In case of contact with eyes, wash thoroughly with plenty of water and seek medical advice if symptoms persist. If contact with skin occurs, it must be removed before curing takes place. Wash off with an industrial skin clearer followed by plenty of soap and water. Do not use solvent. Ensure adequate ventilation when using these products.

