PENTENS E-610CR

High Performance, Chemical-resistant Epoxy Resin

Product Data Sheet

Description

PENTENS E-610CR is a 100% solids, pigmented, two-component solvent free epoxy resin. It is highly resistant to acids, alkalis and a broad range of chemicals.

PENTENS E-610CR is ideal for use as a protective coating for concrete and steel in extremely corrosive areas where resistance to 99% Glacial acetic acid and 70% sulfuric acid or other strong caustics is needed.

Uses

- Food / Drink Factory which will use high concentrate organic acid for washing production process.
- PCB or electroplating process
- Chemical plants
- Pulp mills secondary containment areas
- Waste treatment
- Gas and electric utilities

Advantages

- Exhibits excellent resistance to strong acids, alkalis, and most industrial chemicals and solvents.
- High mechanical loading capacity.
- Solvent free

Technical & Physical Data

Color	Green,Yellow
Solid content	100%
VOC content	0%
Pot life (25°C)	20 minutes
Consumption	
Coating 0.3mm	0.40 kg/m^2
Self-leveling 0.8mm	1.0 kg/m^2
Foot traffic	8 hours
Full cure	7 days
Hardness (Shore D)	85
Compressive strength	680 kg/cm^2
Abrasion resistance (CS-17)	30 mg
Adhesion to concrete	21 kg/cm^2 (100% concrete failure)
Shelf Life & Storage Condition	1 year at dry and cool place
Packaging E-610CR A	12.5kg pail
E-610CR B	5kg pail

Chemical Resistance

Reagent	Time of immersion			
Sulfuric acid	10 min	1 day	30 day	60 day
98%	○	○	X	X
70%	◎	◎	◎	◎
30%	◎	◎	◎	◎
Sodium hydroxide				
70%	◎	◎	◎	◎
50%	◎	◎	◎	◎
10%	◎	◎	◎	◎
Hydrochloric acid				
27%	◎	◎	◎	◎
Nitric acid				
60%	X	X	X	X
30%	◎	○	X	X
10%	◎	◎	◎	◎
Glacial acetic acid				
99%	◎	◎	◎	◎
70%	◎	◎	◎	◎
30%	◎	◎	◎	◎

◎: Very good ○: Good X: No good

* Note: 7 days curing, @ room temperature

Instruction for Use

Surface Preparation
The substrate must be clean and free from all lose particles, dust, cement laitance, oil and other contaminants.

Priming
Mineral based substrates must be primed with the low viscosity, solvent-free epoxy resin PENTENS E-500. On porous substrates or on substrates which are uneven, an epoxy resin scratch coat should be applied to avoid formation of bubbles. A scratch coat consists of PENTENS E-500 and AG-40 in a mixing ratio of 1:4

Mixing
To premix the E-610CR-A part is necessary to make it homogeneously before mixing with B part.

PENTENS E-610CR consists of exact quantities of base and hardener components contained within the same pack. Before application, the base and the hardener components are carefully mixed together by means of a slowly rotating electric drill with paddle. To complete mixing the resin is poured from one can to another and mixed again. To ensure the correct mixing ratio and for ecological reasons packs should be emptied thoroughly.

Application

Coating :
Application of PENTENS E-610CR is normally by means of airless spray, brush, roller.

Self-leveling
Application of PENTENS E-610CR is normally by means of steel trowels or rubber squeegees. Freshly applied coatings have to be rolled with a spiked roller over the entire surface to remove entrapped air bubbles.

Curing
- Foot traffic after 8 hours
- Full mechanical and chemical resistant is achieved after 7 days for full cure.

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.

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