

# PENTENS E-610CR

## Product Data Sheet

### High Performance, Chemical-resistant Epoxy Resin

#### Description

PENTENS E-610CR is a 100% solid, 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 against 99% glacial acetic acid and 70% sulfuric acid or other strong caustics is needed.

#### Uses

- Food and beverage factory which will use high concentrated organic acid for washing in production process
- PCB or electroplating process
- Chemical plants
- Pulp mills secondary containment areas
- Waste treatment
- Gas and electric utilities

#### Advantages

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



#### Technical & Physical Data

Color	Green, Yellow, etc	
Solid Content (%)	>80	
Pot Life (25°C)	20 minutes	
Consumption		
Coating	0.3mm	0.40 kg/m <sup>2</sup>
Self-leveling	0.8mm	1.0 kg/m <sup>2</sup>
Foot Traffic	8 hours	
Full Cure	7 days	
Hardness (Shore D)	85	
Compressive Strength	680 kgf/cm <sup>2</sup>	
Abrasion Resistance (CS-17)	30 mg	
Adhesion to Concrete	21 kgf/cm <sup>2</sup> (100% concrete failure)	
Shelf Life & Storage Condition		
1 year at dry, cool place		
Packaging	E-610CR A	15kg /pail
	E-610CR B	5kg /pail

#### Chemical Resistance

Reagent	Time of Immersion			
	10 min	1 day	30 days	60 days
<b>Sulfuric Acid</b>				
98%	○	○	X	X
70%	◎	◎	◎	◎
30%	◎	◎	◎	◎
<b>Sodium Hydroxide</b>				
70%	◎	◎	◎	◎
50%	◎	◎	◎	◎
10%	◎	◎	◎	◎
<b>Hydrochloric Acid</b>				
27%	◎	◎	◎	◎
<b>Nitric Acid</b>				
60%	X	X	X	X
30%	◎	○	X	X
10%	◎	◎	◎	◎
<b>Glacial Acetic Acid</b>				
99%	◎	◎	◎	◎
70%	◎	◎	◎	◎
30%	◎	◎	◎	◎

◎ Very good      ○ Good      X No good

\* Note: 7 days curing at room temperature

## Instruction for Use

### Surface Preparation

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

### Priming

Substrates must be primed with PENTENS E-008. Any holes and imperfections should be filled with epoxy grout or filler. For porous or uneven substrates, an epoxy resin scratch coat should be applied to avoid formation of bubbles. A scratch coat consists of PENTENS E-502 and fine silica sand in a mixing ratio of 1kg : 0.3kg.

### Mixing

Pre-mix E-610CR-A part to make it homogeneous before mixing with B part.

PENTENS E-610CR consists of the exact quantities of base and hardener components within the same pack. Before the 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 using airless spray, brush and roller.

### Self-leveling

Application of PENTENS E-610CR is normally by using 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 resistance is achieved after 7 days of being fully cured.

## Cleaning

Tools and equipment can be cleaned with thinner immediately after use.

## Safety

Do not use solvent. Ensure adequate ventilation when using these products. Otherwise, use respiratory equipment. Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. If contact with eyes, rinse 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 cleanser followed by plenty of soap and water.

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