

PENTENS E-620AS

Anti-Static Water-based Epoxy Coating

Product Data Sheet

Description

PENTENS E-620AS is a water-based, two-component, anti-static epoxy coating for floors, walls and ceilings. PENTENS E-620AS is easy to apply and exhibits excellent adhesion. When it is fully cured, PENTENS E-620AS provides excellent mechanical and anti-static properties.

Uses

PENTENS E-620AS is recommended for walls and floors in environments where static electricity and stray currents produced by friction pose risks of explosion or interference during the production of electronic parts. It is ideal for floors in:

- Electronics industries
- Wafer and PC component production
- Synthetic fiber mills
- Operating theatre and recovery rooms
- Processing and handling of combustible goods

Advantages

- Seamless.
- Easy to apply.
- Anti-static.
- Good chemical resistance.
- Environmentally friendly.
- Reliable performance.

Technical & Physical Data

Form	Liquid
Specific Gravity	1.3±0.05 kg/l
Solid Content	>60% by weight
Pot Life @ 25°C	30 minutes
Flash Point	90°C
Foot Traffic Resistance	24 hours
Full Chemical and Mechanical Resistance	7 days @ 20°C
Resistivity	$>1 \times 10^4 \Omega$ to $<1 \times 10^6 \Omega$
Application Temperature	10°C to 35°C
Service Temperature	-10°C to 60°C
Storage Condition	Store in a dry, cool place
Shelf Life	1 year when unopened and undamaged.
Packaging	
■ Component A:	20kg /pail
■ Component B:	4kg /pail

Consumption

System	Product	kg/m ²	mm
Primer	E-008 or E-620TR	0.2 – 0.3	0.2 – 0.3
Screed (Optional for Leveling)	E-502+Silica Sand	1.0 – 2.0	0.8 – 1.6
Copper Grounding Strips			
Conductive Base Coat	E-502AS	0.13 – 0.2	0.1 – 0.15
Conductive Top Coat	E-601AS or E-603AS or E-620AS	0.6 – 1.5 0.3 – 0.5 0.3 – 0.5	0.4 – 1.2 0.2 – 0.4 0.2 – 0.4



Disclaimer. All representations and recommendations set forth are given in good faith and to the best of our knowledge. However due to varying conditions and applications, the buyer shall conduct its own tests of this product before use. Under no circumstances will the manufacturer be liable for any loss or damages caused by incorrect usages. The sale of this product shall be on terms and conditions set forth on Pentens order acknowledgement.

Instruction for Use

Surface Preparation

It is essential that PENTENS Anti-Static Epoxy Flooring System is applied to sound, clean and dry substrates in order to achieve maximum adhesion between the floor coating and substrate.

The substrates in contact with the ground must have a vapor barrier installed, or applied with PENTENS T-303 Cementitious Damp-proofing Leveling Mortar before priming. The moisture content of the substrate shall not be higher than 4% throughout.

Primer

Mix component A and component B of epoxy primer (PENTENS E-008 or E-620TR) with a low speed electric or pneumatic power stirrer until a homogeneous substance is achieved. Immediately pour the material onto the substrate after mixing, spread the mixture using a squeegee or paint roller. For very porous substrates, a second primer coat may be required.

Epoxy Screed (Optional)

Distribute the mixture of PENTENS E-502 and silica sand or selected aggregates onto the cured primer as a layer of mortar screed and trowel the mortar screed to the required thickness. After the epoxy screed is cured, high spots or trowel marks should be rubbed away and dust or other debris removed by vacuum cleaning.

Copper Grounding Strips

When the primer/screed has cured, self-adhesive copper strips of 10 - 20 mm in width and 50m in length are bonded to the primed/screed surface. It is prudent to place strips at every 1m distance longitudinal and parallel to the floor. The strips are grounded near a column in the mid section of the floor.

However, you may consult with the project owner or the consultant on possible special grounding requirements.

Conductive Base Coat

PENTENS E-502AS must be mixed homogeneously prior to application, using an electrical stirrer at approximately 300-400 rpm. Mixing time is minimum 3-4 minutes but depending on the circumstances, it may take longer until a homogeneous mix is achieved. The mixed PENTENS E-502AS should be applied to the prepared surface by using trowel. Wait 12 to 24 hours for cure.

For optimum performance, it is recommended to slightly grind the surface of the body coat.

Conductive Top Coat

PENTENS E-620AS must be mixed homogeneously by using an electrical stirrer at approximately 300- 400 rpm. Mixing time is minimum 3-4 minutes but depending on the circumstances, it may take longer until a homogeneous mix is achieved. The mixture is applied at the rate of 0.3-0.5kg/m² to the pretreated substrate by using a spray, paint roller or brush.

Depending on the surface, up to 3 coats may be required to achieve the required finishing.

Cleaning

Clean tools and equipment with paper towels or rags, then wipe using water before the resin hardens.

Safety

PENTENS E-620AS contains certain chemicals which can cause skin irritation if exposed and respiratory reaction if inhaled. Wear gloves, masks and use hand barrier cream while handling the product and wash thoroughly thereafter.

Should skin contact occur, wash immediately with soap and water or an effective hand cleanser. In case of accidental contact with eyes, rinse immediately with clean water and seek medical treatment.