Penncoat™ 310 ESD Lining

SELECTION & SPECIFICATION DATA

Type
Vinyl Ester Electrostatic Dissipative Lining

Description
Penncoat™ 310 ESD Lining is a high-solids modified vinyl ester electrostatic dissipative lining.

Uses
- Trenches, sumps, and secondary containment areas where flammable chemicals are used in flavor, fragrance, chemical, and pharmaceutical processing facilities.
- Floors subject to foot and light fork truck traffic

Features
- 10^6 -10^8 ohms electrical resistance per ANSI/ESD STM7.1-2020 when applied over Penntrowel™ VE Conductive Primer
- Resists corrosive effects of dilute inorganic acids, alkalis, alkaline salts, acid salts, oils, grease, milk products, fats, blood, most dilute organic acids and many solvents
- UV-resistant for exterior use

SUBSTRATE & SURFACE PREPARATION

All
Substrate must be clean, dry and free of contaminants

Steel
Immersion: SSPC-SP 10/NACE 2 Near White Metal Blast with angular profile of 2.5 - 3.5 mils.

Non-immersion: SSPC-SP 6/NACE 3 Commercial Blast with angular profile of 1.5 - 3.0 mils.

Concrete
Concrete must be cured 28 days at 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with SSPC-SP 13/NACE 6. Required surface profile is CSP 3-5. Voids in concrete surfaces may require filling. Mortar joints should be cured a minimum of 15 days.

Prime steel and concrete with Penntrowel VE Conductive Primer.

MIXING & THINNING

Ratio
1 gallon Part A resin: 2.0 – 3.0 fl. oz. Part B hardener by volume, 1: 0.016 by weight.

Mixing
Stir resin until uniform in consistency. Continue mixing while slowly adding the hardener into the center vortex, and mix thoroughly for 3 minutes, moving the mix blade up, down and around the pail to catch all the edges.

Thinning
Do not thin.

Pot Life

50°F (10°C)	75°F (24°C)	90°F (32°C)
60 minutes	30 minutes	15 minutes

Pot life is shorter at higher temperatures. A larger volume of mixed material will have a shorter pot life than a smaller volume.

Cleanup
Methyl ethyl ketone or lacquer thinner

APPLICATION GUIDANCE

Installation Specification
CES-259 Installation Specification for Penncoat 331 and 340 Linings

Installation Conditions
Penncoat 310 ESD Lining is formulated for ideal handling at 70°F (21°C). Materials and substrate should be acclimated to the air temperature prior to installation, and the air temperature should be between 50°F (10°C) and 90°F (32°C) during installation and cure.

Brush
Brush application in small areas

Roller
Short nap or mohair phenolic core roller

Spray
Consult ErgonArmor for guidance

CURE TIME & RECOAT WINDOW

Substrate Temperature	Initial Set	Minimum Recoat	Maximum Recoat	Full Cure
50°F (10°C)	5 hours	12 hours	7 days	48 hours
75°F (24°C)	2 hours	4.5 hours	7 days	24 hours
90°F (32°C)	1.5 hours	3 hours	3 days	8 hours

When surface temperatures exceed 95°F (35°C) or are exposed to direct sunlight, overcoating should take place as soon as coating may be walked on or handled without marring in order to avoid intercoat adhesion issues.

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PACKAGING, ESTIMATING & HANDLING

Product	Code	Packaging
Penncoat 310 ESD Lining Part A Resin Dark Gray	19651	4.4-gal (44 lb) pail
CHP Hardener	19552 21922	11.2 fl. oz. (0.7 lb) bottle 1 gal (8.3 lb) can

A 4.5-gal unit consists of 1 x 44-lb pail resin and 1 x 0.7 lb bottle hardener.

Theoretical Coverage

720 ft^2 (66.9 m^2) per 4.5-gal unit at 10 mils

Storage & Shelf Life

Maintain products in original packaging and sealed until ready for use. Estimated shelf life of resin is 6 months and hardener is 1 year when stored in a dry area at 70°F (21°C). Actual shelf life may vary with storage conditions.

If there is any question with respect to the quality of the components, check reactivity prior to use. For assistance consult with ErgonArmor.

Safety

Mixes and applications of this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and safety data sheets before using.

Ventilation

Provide thorough air circulation during and after application until the material has cured when used in enclosed areas.

TYPICAL PHYSICAL PROPERTIES

Property	Typical Value
Color	Dark gray
Gloss	Not applicable
Density	10.1 lb/gallon (1.21 kg/L)
Solids content	100% reactive

Rev 03/2023