



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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">10⁶ -10⁸ ohms electrical resistance per ANSI/ESD STM7.1-2020 when applied over Penntrowel™ VE Conductive PrimerResists corrosive effects of dilute inorganic acids, alkalis, alkaline salts, acid salts, oils, grease, milk products, fats, blood, most dilute organic acids and many solventsUV-resistant for exterior use

SUBSTRATE & SURFACE PREPARATION

All	Substrate must be clean, dry and free of contaminants
Steel	<p>Immersion: SSPC-SP 10/NACE 2 Near White Metal Blast with angular profile of 2.5 - 3.5 mils.</p> <p>Non-immersion: SSPC-SP 6/NACE 3 Commercial Blast with angular profile of 1.5 - 3.0 mils.</p>
Concrete	<p>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.</p> <p>Prime steel and concrete with Penntrowel VE Conductive Primer.</p>

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) 60 minutes	75°F (24°C) 30 minutes	90°F (32°C) 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 Armor 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.



Penncoat™ 310 ESD Lining

PACKAGING, ESTIMATING & HANDLING

Product	Code	Packaging
Penncoat 310 ESD Lining Resin Dark Gray	19651	4.4-gal (43 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 ft² (66.9 m²) 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). Warmer resin storage conditions will dramatically reduce shelf life. Store resin between 55°F (13°C) and 65°F (18°C) for maximum shelf life. 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 Armor.

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	9.86 lb/gallon (1.21 kg/L)
Solids content	100% reactive

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