



Technical Datasheet

DESCRIPTION

200-d PumaESD® is a static dissipative, abrasion resistant, thin mil, floor coating system. This 2 or 3 coat system has zero VOC's (low odor) and is typically applied at thickness of 16-20 mils:

Primer Coat: 104-PumaPOXY MB

optional mid-coat 104-PumaPOXY MB

Top Coat: 112-PumaESD/d aliphatic polyester urethane.

Surface has a light glass bead (100/170) finish which imparts slip resistance, but is also mop cleanable. *107-PumaPOXY (chemical cure) primer/mid-coat may be substituted for 104-PumaPOXY, if concrete moisture is not a concern. Optional mid coat shall provide enhanced hiding power for this system, if the concrete is not in pristine condition.

USES:

200-d PumaESD® can be installed over new concrete, and in areas that have minimal substrate damage. It is recommended for areas where the damaging effects of electrostatic discharge (ESD) cannot be tolerated. Primary industries that use ESD flooring include electronic assembly and storage, clean rooms, aerospace and military applications.

ADVANTAGES:

- Extremely low, non-offensive odor.
- Consistent resistance to ground without the need of a ground plane primer utilizing conductive particulates and polymers
- BODY VOLTAGE GENERATION (BVG) below 15 volts with conductive footwear

ELECTRICAL PROPERTIES:

- Typical resistance readings would be 10^5 to 10^8 ohms (100k-100M)
- Meets the requirements set forth in ANSI/ESD S20.20-2021.
- **Resistance:** This product is capable of exhibiting surface resistance values in the static dissipative and conductive ranges in accordance to values defined in test method EOS/ESD Association ESD STM S7.1-2020.
- Dissipates a 1000-volt charge to 0 volts in less than 0.1 seconds
- Maintains ESD properties throughout the thickness of the applied coating and not dependent humidity for proper conductivity (unlike carbon fiber systems). To assure proper contact to floor surface, persons in area protected by ESD floor coating must wear approved quality ESD footwear.

DURABILITY

Resistant to abrasion and other physical aggression from foot traffic, hand carts, and occasional powered lifts commonly found in industrial facilities.

COMPOSITION

Non-toxic static dissipating, polyurethane resin system combined with glass bead aggregates. Complies with VOC regulations for industrial maintenance coatings in the OTC and CA.

APPEARANCE

SHEEN: Semi Gloss.

Slip Resistant: Meets ADA Standard - Coefficient of Friction (.6)
Surface is easy to clean.

MVT (Moisture Vapor Transmission)

200-d PumaESD® handles high levels of MVT. Utilizing 16 mils of PumaPOXY MB primer, it blocks up to 25 lbs or MVT. This helps to protect flooring from the catastrophic effects of moisture in and below the concrete..

REPAIRABILITY

The lack of dependence on conductive fiber and ground plane primers allows this system to be repaired without sacrificing electrical performance.

APPLICATION

PumaESD® products are installed by certified applicators throughout the U.S.A.

SURFACE PREPARATION

To be assured of maximum adhesion and properties from any Puma-Crete® resin products the correct surface is essential. Please refer to technical data sheet "Surface Preparation".

STORAGE, MIXING & APPLICATION TEMPERATURE

The storage, mixing and application conditions can affect the quality of the finish produced. Optimum storage and application temperature are 70°F.

CURE SCHEDULE (70 deg F)

24 hours (foot traffic), 36 hrs Full cure (heavy traffic)

MAINTENANCE

Regular cleaning of the applied system is recommended in order to maintain slip resistant properties and cosmetics. Normal cleaning agents (such as Simple Green) w/ auto floor scrubber.

CHEMICAL RESISTANCE

Excellent resistances to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents.

COLORS AVAILABLE

Standard colors: Std color is Medium Gray (also available in 6 additional colors—see Puma-Crete color chart.

WARRANTY

5 years (refer to PumaCRETE® ESD warranty terms and conditions)

CONDITIONS OF USAGE:

Installation of all products purchased must be by professional installers periodically published by PUMA-CRETE or otherwise approved by PUMA-CRETE in writing. Modification to any of PUMA-CRETE's products voids the warranty. The installer shall maintain a written contemporaneous record of field conditions (including, without limitation, surface and atmospheric conditions, usage rates, and lot numbers of products installed). PUMA-CRETE reserves the right of inspection of any installed product, installation and maintenance records and records of field conditions and may conduct additional testing as is reasonably required to investigate any warranty claims. Warranty shall only apply for products or materials that have been paid for in full.

CURED PROPERTIES*: Properties	Test Method	Results
Conductivity Resistance Static Charge Decay	ANSI ESD-7.1 MIL-B-81705B	10^6 to 10^9 5000V to 0, <0.1sec
Abrasion Resistance	ASTM D4060	35 mg
Tensile Strength	ASTM D638	2600 PSI
Compressive Strength	ASTM D695	8700 PSI
Flexural Strength	ASTM D790	10,500 PSI
Hardness (shore D)	ASTM D2240	75/70
Adhesion	ACI503R	300 psi