



PETRASTAT ESD PRIMER

advanced coating systems



HIGH PERFORMANCE ELECTROSTATIC DISSIPATIVE COATING

GENERAL PRODUCT DESCRIPTION

PetraStat ESD Primer is a two component waterborne black ESD primer. It serves as a highly conductive ground plane for Petra-Stat ESD systems. Petra Stat ESD Primer meets both static dissipative and conductive requirements. Its epoxy chemistry provides excellent bonding characteristics and its long working time provides ease of application. PetraStat ESD Primer is generally applied at 300-350 SF per gallon. Its design features provide for the highest industrial demands. PetraStat ESD Primer is available in black only. Advantages:

- Low odor
- VOC Compliant, Waterbased
- Chemical resistant
- No amine blush
- long pot life
- User friendly application

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Surface Abrasion	0.13 (Wear Index)	ASTM D 1044
Coefficient of Friction	0.5 Minimum	ASTM D 2047
Flammability	Self-extinguishing	ASTM D 635
Hardness, Shore D	70-80	ASTM D 2240
Flash Point	>200°F	ASTM D 93

PRODUCT DATA

Volumetric Ratio:	9 to 1
Solids:	40%
Coverage:	300-350 SF per gal.
Application Temperature:	65-90°F
Thinning:	Not required
Pot Life:	1-2 hours
Working time on floor:	45 minutes
Cure Time:	6-8 hours (walking)
Critical recoat time:	24 hours
Shelf life:	12 months (may require re-mixing)

CLEANUP

PetraStat ESD Primer, while in an unreacted state, may be cleaned up with water and degreaser. Isopropyl alcohol or acetone may be needed once the resin begins hardening.

WARRANTY

Petra Polymers products are warranted for one year after date of application. Please refer to the Petra Polymer's Limited Material Warranty for additional clarification.

PACKAGING

PetraStat ESD Primer is available in one kit size:

	Part A	Part B
5 Gallon Kit	4.5 gal.	5 gal.

CONCRETE PREPARATION

Before the coating is applied, the concrete must be:

- Clean-- Contaminants removed
- Profiled-- Surface etched
- Sound--Cracks repaired

Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting, diamond grinding, scarifying, and scabbling are all acceptable methods. The concrete profile should be approximately 40-60 grit sandpaper after preparation.

MIXING

The ratio of Petra Stat ESD Primer is 9 to 1. That is, nine parts of A - resin, to one part of B - hardener. Generally, the five gallon kit is ideal for application. Mix the following with a drill and jiffler mixer.

1. Pre-mix part A (4.5 gallons) for 1-2 minutes or until uniform.
2. Add the half gallon of part B and mix for 2-3 minutes.

Note: If the primer has been sitting on the shelf for longer than the shelf life, it may be partially solidified. This is normal. Use a mixer to break up the material. Keep mixing until the material is homogenized. Pour the material through a filter prior to mixing it with part B content.

APPLICATION PROCESS

PetraStat ESD Primer is applied in a one coat application. For estimation purposes, use 300-350 SF as a coverage rate. PetraStat ESD Primer is always applied over either Petra Prime or another Petra HB system with a smooth finish. Therefore, coverage rates do not vary much since a smooth finish provides consistent application rates. Make sure that PetraStat ESD Primer is applied within the critical re-coat interval of the coating on the floor below it (usually within 24 hours). If the recoat interval has been passed, you must sand and clean the floor to insure a good mechanical bond before applying the primer.

1. Always apply in descending temperatures. Optimum ambient temperature should be between 65-90°F and five degrees above the dew point during application.
2. Mix five gallons of resin using above mixing instructions.
3. Apply approximately 300 to 350 SF per gallon by pouring out on surface in a ribbon, while walking and pouring at the same time until bucket is empty.
4. Using a window squeegee on a pole, pull PetraStat ESD Primer over substrate. Pull resin as thin as possible while still wetting out concrete and uniformly covering surface. This allows trapped air to escape more easily.
5. Using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards.
6. Lastly, backroll in the opposite direction from step 5 and allow the primer to cure.
7. Apply PetraStat ESD Topcoat within 24 hours.

PRODUCT LIMITATIONS

Ground level concrete slabs emit moisture vapor. The allowable moisture emissions for concrete is 3 lbs. / 1000 S/F over a twenty-four hour period. If moisture is above this level, then blistering and delamination of coating may occur. A calcium chloride test should be performed to determine concrete moisture level. If moisture levels exceed the 3 lb. limit, a concrete moisture vapor control system should be used first before applying coating system. Please contact Petra technical department for approved systems.