



VoltBond SF

Solvent-Free ESD Conductive Primer

Product Description

A two-component, solvent-free, conductive epoxy primer designed for use in ESD “Electrostatic Discharge” flooring systems. It provides excellent adhesion to concrete substrates while ensuring reliable electrical conductivity for subsequent antistatic or conductive coatings.

Recommended Uses:

- Electronics manufacturing facilities
- Cleanrooms and pharmaceutical plants
- Automotive and aerospace assembly areas
- Warehouses and battery-charging zones
- Any static-sensitive environment requiring conductive flooring

Properties

- Solvent-Free – Low VOC, eco-friendly, and odorless during application.
- Conductive Layer – Ensures electrical continuity for ESD flooring systems.
- Strong Adhesion – Bonds securely to concrete and cementations substrates.
- Durable Film – Resistant to mechanical stress and chemical exposure.
- Controlled Resistance – Maintains defined electrical resistance range for ESD compliance.
- The product Meets IEC 61340-5-1 standards for ESD control.

<u>TECHNICAL PROPERTIES</u>	
<i>Appearance/Color</i>	Black conductive liquid
<i>Density:</i>	~1.4 kg/liter
<i>Volume solids %:</i>	100 %
<i>Theoretical spreading rate:</i>	10 m ² /ltr / 10 m ² /kg (100 micron DFT)
<i>Consumption:</i>	100-150 g/m ²
<i>Recommended DFT:</i> <i>(Dry Film thickness)</i>	100-150 micron
<i>Electrical Resistance:</i>	10 ³ – 10 ⁶ Ω (depending on system)
<i>Adhesion Strength:</i>	≥ 2.0 N/mm ² (concrete pull-off test)
<i>Surface dry:</i>	6 - 8 approx. hour(s) 23°C/73.4°F 50% R.H.
<i>Light foot traffic</i>	12-18 hours (23°C and 50% R.H.)
<i>Full cure time:</i>	7 days (23°C and 50 % R.H.)
<i>Application temperature:</i>	+8 °C/46.4° F and +35 °C/ 95°F
<i>Min. cure temperature:</i>	+10°C/50°F



Application Details

<i>Mixing Ratio:</i>	Component A: 3.5 – Component B: 1.5 (By weight or by volume)
<i>Application method:</i>	Brush – Roll – Airless Spray – Metal Trowel - Squeegee
<i>Pot Life:</i>	30–40 minutes
<i>Thinner:</i>	Do Not Thin The Product

Surface Preparation:

Substrate must be clean, dry, and free from dust, oil, or laitance. Mechanical grinding or shot-blasting recommended.

Mixing Ratio:

Mix base and hardener thoroughly at the specified ratio by using a slow-speed drill mixer to avoid air entrapment.

PRECEDING COAT:

Nothing

Important Remarks:

- Surfaces must have enough structural strength.
- Concrete should have minimum of 25 N/mm² compression resistance and minimum 1, 5 N/mm² tensile strength.
- Applications below 10°C should be avoided.
- High temperatures lower the pot life of the product, while low temperatures extend cure time and consumption.
- Be careful about product mixing ratios.
- The surface should be protected from moisture and rain for 4-6 hours after application.
- All application tools and equipment should be cleaned with thinner immediately after the use. Cured material can only be removed mechanically.
- Use only where application and drying can proceed at temperatures above: 10°C/50°F. The temperature of paint itself should be 15°C/59°F or above. Apply only on a dry and clean surface with a Temperature above the dew point to avoid condensation. In confined spaces provide adequate ventilation during application and drying.
- The natural tendency of epoxy coatings to chalk in outdoor exposure.

Shelf life & Storage:

12 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.

Safety:

For information and precautions on the safe handling, transportation storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.



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