



NEXT-GENERATION PERMANENT
ELECTROSTATIC PROTECTION

>> ESD Paints
>> Anti-Static Paints
>> Conductive Paints

Technical Data Sheet
ProShield ESD WPB1
For Paper Products



Powered by
Novel Polymer Technology

ProShield ESD WPB1 is an advanced water-based paint specifically designed for paper products such as carton boxes and packaging materials. It provides anti-static, ESD or conductive properties, ensuring reliable static protection and conductivity in sensitive applications. This paint is homogeneous, offering consistent performance across the entire surface, free from metallic or carbon fillers.

What sets ProShield ESD WPB1 apart is its permanent functionality: it retains its anti-static, ESD or conductive properties as long as the paint remains visible. Its ability to provide excellent weather resistance, including protection against moisture and humidity, makes it ideal for both indoor and outdoor use.

Additionally, the product is designed to align with sustainable practices in the paper industry:

- Eco-Friendly and Safe: RoHS compliant, low VOC, and free from harmful solvents such as toluene, xylene, and MEK. Its water-based nature ensures minimal environmental impact.
- Recyclable and Re-pulpable: Maintains the recyclability of paper substrates, allowing coated materials to be recycled alongside uncoated paper.

ProShield ESD WPB1 combines durability, flexibility, and ease of application with superior environmental benefits, making it an ideal choice for industries seeking sustainable and reliable static control solutions.

Specifications

Viscosity (ISO 2431:2015)	: 14 ± 2 (B4 Cup, sec), 17 ± 2 (Zahn2, sec)
Density (ISO 2811)	: 1.14 ± 0.04 g/cm ³
Fineness of Grind (ISO 1524)	: 30 ± 5 µm
Surface Resistivity (ASTM D257)	: 10 ⁴ to 10 ⁹ ohm/sq
Solid content	: 60 ± 1%
Coverage	: Approx. 60 sq. meters per kg @ 10 µm

Curing Time:

Dry Time	: 25 minutes minimum
Full Cure	: 3 Days



Application Instructions for ProShield ESD WPB1 for Paper Products.

Surface Preparation:

1. **Cleaning:** Ensure the paper surface is free of dust, grease, or other contaminants. Use a clean, dry cloth or low-pressure air blower to remove loose particles.
2. **Moisture Content:** Ensure the substrate is dry to prevent application issues like bubbling or uneven adhesion.
3. **Trial Coat:** Perform a small trial coat on a sample area to assess compatibility and results before full-scale application.

Application Method:

1. **Stir Product:** Stir the paint thoroughly before use to ensure homogeneity.
2. **Viscosity Adjustment:** Adjust viscosity as required using clean water or Demineralized Water (DM water) for optimal results.
3. **Application Techniques:**
 1. Brush Coating
 2. Spray Coating
 3. Blade Coating
 4. Roll Coating
 5. Curtain Coating
 6. Air Knife Coating.

Tool Cleaning:

- **Wet Condition:** Clean tools with water immediately after use to prevent buildup.
- **Dry Condition:** Use paint removers or strippers to clean dried material from tools.

Additional Notes:

Environmental Conditions: Apply in a well-ventilated area, ideally at temperatures between 10°C and 30°C, with relative humidity below 70%.

Equipment Maintenance: Ensure all application tools and equipment are clean and well-maintained for consistent results.



Available Packing sizes:

Anti-Static (AS) : Resistivity $10^8 - 10^9 \Omega/\text{sq}$

Part Code	Net Weight
• WPB1/AS/1	1 kg
• WPB1/AS/5	5 kg
• WPB1/AS/20	20 kg

ElectroStatic Discharge (ESD) : Resistivity $10^6 - 10^7 \Omega/\text{sq}$

Part Code	Net Weight
• WPB1/ESD/1	1 kg
• WPB1/ESD/5	5 kg
• WPB1/ESD/20	20 kg

Conductive (CD): Resistivity $10^3 - 10^5 \Omega/\text{sq}$

Part Code	Net Weight
• WPB1/CD/1	1 kg
• WPB1/CD/5	5 kg
• WPB1/CD/20	20 kg

Storage:

Store **ProShield ESD WPB1** in a cool, dry place, away from excessive heat and cold, in tightly closed containers.

Caution:

Apply **ProShield ESD WPB1** following local health and safety regulations. Use **standard PPE** like gloves, eye protection, and respiratory masks. Ensure proper ventilation during application.

Refer SDS prior to use.

WPB1 | Version 1.0 | JAN2025

SCH COATING SOLUTIONS PRIVATE LIMITED

Plot #124, Navodaya Industrial Park,
Phase-V, Cherlapally IDA, 500051. Hyderabad, Telangana, INDIA.

madhusudan.m@schservices.com.

Ph: 9000383674; 9182368588; 9110381776.