



Technical Data Sheet

ProShield ESD 2FL1

For Flooring, Walls & Ceilings



Powered by
Novel Polymer Technology

ProShield ESD 2FL1 is a versatile one-part and two-part paint ideal for flooring applications. It can also be used for walls, ceilings, and any surfaces made of stone, tiles, cement, or similar materials. The product can be provided in ESD, Conductive or Anti-Static versions. Designed for high-demand environments the paint is RoHS compliant, low VOC, and free from harmful solvents like toluene, xylene, and MEK, ensuring safety and environmental responsibility.

Additionally, it exhibits fairly good solvent resistance, effectively meeting the demands of most environments.

The use of Primer 2PFL1 is highly recommended for both single and dual-part applications to ensure optimal adhesion and performance. Performing a trial coat is suggested to evaluate surface compatibility and application conditions.

Also, Hardener 1HD1 can be mixed to enhance durability and resistance to abrasion and most chemicals, while Thinner 1ET1 allows for viscosity adjustment for easier application. These features make ProShield ESD 2FL1 the ideal solution for industrial, commercial, and residential projects requiring superior static control and durability.

Specifications

Viscosity (ISO 2431:2015)	: 14 ± 2 (B4 Cup, sec), 34 ± 2 (Zahn2, sec)
Density (ISO 2811)	: 1.03 ± 0.04 g/cm ³
Fineness of Grind (ISO 1524)	: 25 ± 5 microns
Surface Resistivity (ASTM D257)	: 10 ⁴ to 10 ⁹ ohms/sq
Pull of Strength (ASTM D4541)	: 825 psi
Flexibility (ASTM D522)	: Pass
Solvent Resistance	: Good for occasional exposure
Coverage	: Approx. 10-12 Sq. meters per Kg @ 50 µm

Curing Time:

1 Part Application:

Tack-free	: 60 minutes minimum
Dry Time	: 6 Hours minimum
Full Cure	: 4 Days minimum

2 Part Application (with Hardener 1HD9):

Tack-free	: 60 minutes minimum
Dry Time	: 6 Hours minimum
Full Cure	: 4 Days minimum
Pot Life	: Approximately 45 minutes after mixing



Application Instructions for ProShield ESD 2FL1 for Flooring.

Surface Preparation:

1. **Cleaning:** Ensure the surface (floor, wall, or ceiling) is free from dirt, grease, oil, and other contaminants. Use industrial-grade cleaners for thorough cleaning.
2. **Moisture Test:** For cement or concrete surfaces, conduct a moisture test to ensure dryness. Excessive moisture can hinder proper adhesion and curing of the paint.
3. **Primer Application:** Apply Primer 2PFL1 to ensure optimal adhesion for both single and dual-part applications. Follow the primer's curing instructions in 2PFL1 TDS before proceeding with the paint application.
4. **Trial Coat:** Perform a trial coat on a small section of the surface to assess compatibility and application conditions.

Application Method for Single-Part:

1. **Stir Product:** Stir the paint thoroughly before use to ensure uniformity.
2. **Viscosity Adjustment:** If necessary, adjust viscosity using Thinner 1ET1 as per product specifications.
3. **Application Techniques:** Apply using a brush, roller, or spray method, depending on the surface and area size. Ensure even coverage.

Application Method for Two-Part (using Hardener 1HD1):

1. **Mixing:** Mix 14 parts of 2FL1 by weight with 1 part of Hardener 1HD1.
2. **Viscosity Adjustment:** Adjust viscosity with Thinner 1ET1 before application if needed.
3. **Pot Life:** Use the mixed product within 45 minutes to ensure optimal performance and finish quality.
4. **Application:** Apply the mixed product using brush, roller, or spray methods. For larger areas, spraying or rolling is recommended for efficiency and uniformity.

General Application Conditions:

- **Ambient Conditions:** Apply in well-ventilated areas, ideally at temperatures between 10°C and 45°C, and away from excessive humidity.
- **Equipment Cleanliness:** Ensure all equipment is clean and functioning properly to avoid poor application quality.

Additional Notes:

Safety Measures: Post safety signage and use barriers to prevent traffic on freshly coated surfaces until fully cured.

Surface Versatility: Suitable for flooring, walls, ceilings, and other surfaces like stone, tiles, and cement.



Available Packing sizes:

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

Part Code	Net Weight
• 2FL1/AS/1	1 kg
• 2FL1/AS/5	5 kg
• 2FL1/AS/20	20 kg

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

Part Code	Net Weight
• 2FL1/ESD/1	1 kg
• 2FL1/ESD/5	5 kg
• 2FL1/ESD/20	20 kg

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

Part Code	Net Weight
• 2FL1/CD/1	1 kg
• 2FL1/CD/5	5 kg
• 2FL1/CD/20	20 kg

Supporting Materials

Product	Part Code	Net Weight	Product	Part Code	Net Weight
• Hardener	1HD1	1 kg	• Primer part A	2PFL1/A/1	1 kg
• Thinner	1ET1/5	5 kg	• Primer part A	2PFL1/A/5	5 kg
• Thinner	1ET1/20	20 kg	• Primer part A	2PFL1/A/20	20 kg
			• Primer part B	2PFL1/B/1	1 kg
			• Primer part B	2PFL1/B/5	5 kg
			• Primer part B	2PFL1/B/20	20 kg

Storage:

Store **ProShield ESD 2FL1** in a cool, dry place, away from excessive heat and cold, in tightly closed containers. Ideal storage temperature is between **0°C and 45°C**.

Caution:

Apply **ProShield ESD 2FL1** 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.

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