

ESD-Safe Cleanroom Wipers

Teknipure offers a wide selection of ESD-safe wipers made from different wiper substrates, with sealed edge or sealed border configurations suitable for various environments sensitive to electrostatic discharge. All wipers are manufactured in cleanroom conditions and provide clean ESD protection without contributing particulate contaminants to the process or environment.

Teknipure offers ESD-Safe Wipers in Polyester Knit Carbon Fiber material with sealed edge (TekniClean ESD), Polyester Knit sealed border wipers, dry and presaturated with 70% IPA/30% DIW (TekniClean™ Pro Presat ESD), as well as in Microdenier presaturated (Teknipure Microdenier Presat ESD) and Microfiber woven materials with sealed border, both in dry (MicroClean™ Pro ESD) and presaturated (MicroClean™ Pro Presat ESD).



Static Shield Resealable ESD Bag

Applications:

- Wiping and cleaning surfaces and electronic parts sensitive to electrostatic discharge
- Applying and removing solvents and solutions including disinfectants, lubricants, adhesives and removing residues in ESD-sensitive areas
- Cleaning of cleanroom areas with high risk of static build-ups

Industries:

- Semiconductor / Microelectronics
- Medical Device / Optics
- Aerospace / Defense
- Pharmaceutical / Biologics
- Laboratories / Academia

Cleanroom Environment:

- ISO Class 3 – 8 (EU Grade B-D)
- Class 100 – 100,000

Features and Benefits:

- Teknipure's Carbon Fiber ESD-safe wipers have carbon fibers within their knit structure that dissipates static charge, preventing static buildup and allowing dissipation
- All products are packaged in static-shield cleanroom bags for additional protection from external static build up
- Variety of polyester, microfiber or microdenier wiper substrates provide more precise selection of an ESD-safe product suited to most specific application requirements
- Choice of wiper edge configurations provide low levels of particles and fibers, NVR and ions to meet the strict requirements of different cleanroom grades
- Pre-saturated wipers provide consistent wetness level for optimized and consistent cleaning efficiency
- The IPA used for pre-saturation, is 0.2 µm filtered for additional contamination control

Shelf Life:

- Dry Non-Sterile – 5 years from date of manufacture
- All Presaturated and Sterile – 3 years from date of manufacture

Storage Conditions:

- Store at ambient conditions (59°F (15°C) - 86°F (30°C))

ESD-Safe Cleanroom Wipers

TekniClean® ESD

Part Number	Description	Packaging
TC2PL1-44E	Polyester Knit Carbon Fiber ESD Wiper with Sealed Edge, 4"x4" (10 cm x 10 cm)	400 wipes/bag, 5 bags/case, Total 2000 wipes/case
TC2PL1-99E	Polyester Knit Carbon Fiber ESD-Safe Wiper with Sealed Edge, 9"x 9" (23 cm x 23 cm)	150 wipes/pack (2 bags of 75), 10 packs/case, Total 1500 wipes/case
TC2PL1-12E	Polyester Knit Carbon Fiber ESD-Safe Wiper with Sealed Edge, 12"x 12" (30 cm x 30 cm)	100 wipes/pack (2 bags of 50), 10 packs/case, Total 1000 wipes/case
TC2PL1-18E	Polyester Knit Carbon Fiber ESD Wiper with Sealed Edge, 18"x18" (46 cm x 46 cm)	25 wipes/bag, 10 bags/case, Total 250 wipes/case

TekniClean® Pro ESD

Part Number	Description	Packaging
TC3PB1S-99	Polyester Knit Carbon Fiber ESD-Safe Wiper with Sealed Border, 9"x 9" (23 cm x 23 cm)	100 wipes/bag, 10 bags/case, Total 1000 wipes/case
TC3PB1S-12	Polyester Knit Carbon Fiber ESD-Safe Wiper with Sealed Border, 12"x 12" (30 cm x 30 cm)	100 wipes/bag, 10 bags/case, Total 1000 wipes/case

TekniClean® Pro Presat ESD

Part Number	Description	Packaging
TS3PBI70S-99	Polyester Knit Wiper with Sealed Border, Presaturated with 70% IPA/30% DIW in ESD Static Shield Resealable Bag, 9"x 9" (23 cm x 23 cm)	100 wipes/bag, 5 bags/case, Total 500 wipes/case
TS3PBI70S-12	Polyester Knit Wiper with Sealed Border, Presaturated with 70% IPA/30% DIW in ESD Static Shield Resealable Bag, 12"x 12" (30 cm x 30 cm)	100 wipes/bag, 5 bags/case, Total 500 wipes/case
TS3PBE100S-99	Polyester Knit Wiper with Sealed Border, Presaturated with 100% IPA, 9"x9" (23 cm x 23 cm)	100 wipes/bag, 5 bags/case, Total 500 wipes/case

Microdenier Presat ESD

Part Number	Description	Packaging
TS2PMDUI70Z-99	Polyester Knit Microdenier Wiper with Sealed Edge, Presaturated with 70% IPA/30% DIW, 9"x 9" (23 cm x 23 cm)	50 wipes/bag, 15 bags/case, Total 750 wipes/case

MicroClean™ Pro ESD

Part Number	Description	Packaging
TC3MBWS-99	Microfiber Woven Wiper with Sealed Border, 9"x 9" (23 cm x 23 cm)	100 wipes/bag, 15 bags/case, Total 1500 wipes/case

MicroClean™ Pro Presat ESD

Part Number	Description	Packaging
TS3MBWI70S-99	Microfiber Woven Wiper with Sealed Border, Presaturated with 70% IPA/30% DIW, 9"x 9" (23 cm x 23 cm)	100 wipes/bag, 15 bags/case, Total 1500 wipes/case

Performance characteristics	TekniClean® ESD	TekniClean® Pro ESD/ TekniClean® Pro Presat ESD	Test Method
Particles and Fibers			
LPC >0.50 µm	5.5 x 10 ⁶ particles/m ²	3.5 x 10 ⁶ particles/m ²	IEST-RP-CC004.4, Section 7.2.1
Fibers >100 µm	400 fibers/m ²	200 fibers/m ²	IEST-RP-CC004.4, Section 7.2.2
Nonvolatile residue			
IPA Extractant	≤0.04 g/m ²	≤0.03 g/m ²	IEST-RP-CC004.4
DI Water extractant	≤0.01 g/m ²	≤0.01 g/m ²	
Extractable Ions			
Sodium (Na ⁺)	≤0.02 ppm	≤0.02 ppm	IEST-RP-CC004.4, Section 8.2.2
Potassium(K ⁺)	≤0.01 ppm	≤0.01 ppm	
Chloride (Cl ⁻)	≤0.02 ppm	≤0.02 ppm	
Physical Characteristics			
Material	100% Polyester	100% Polyester	ASTM D3776
Basis Weight	140 g/m ²	140 g/m ²	
Absorbency			
Sorptive capacity	400 ml/m ²	400 ml/m ²	IEST-RP-CC004.4, Section 9.1
Sorptive rate	<1 second	<1 second	

Performance characteristics	Microdenier Presat ESD	MicroClean™ Pro ESD/ MicroClean™ Pro Presat ESD	Test Method
Particles and Fibers			
LPC >0.50 µm	8 x 10 ⁶ particles/m ²	6 x 10 ⁶ particles/m ²	IEST-RP-CC004.4, Section 7.2.1
Fibers >100 µm	340 fibers/m ²	300 fibers/m ²	IEST-RP-CC004.4, Section 7.2.2
Nonvolatile residue			
IPA Extractant	0.087 g/m ²	0.07 g/m ²	IEST-RP-CC004.4
DI Water extractant	0.009 g/m ²	0.015 g/m ²	
Extractable Ions			
Sodium (Na ⁺)	0.052 ppm	0.02 ppm	IEST-RP-CC004.4, Section 8.2.2
Potassium(K ⁺)	0.018 ppm	0.03 ppm	
Chloride (Cl ⁻)	0.028 ppm	0.02 ppm	
Physical Characteristics			
Material	100% Microdenier Polyester	80% Polyester/20% Nylon	ASTM D3776
Basis Weight	158 g/m ²	195 g/m ²	
Absorbency			
Sorptive capacity	360 ml/m ²	340 ml/m ²	IEST-RP-CC004.4, Section 9.1
Sorptive rate	0.4 second	0.4 second	