



Tech-Performance

Cleanroom Wipers

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Description

Tech-Performance Nonwoven is made from 40% polyester / 60% cellulose Nonwoven Wipers Blend, 57 g/m² (Basis Weight) / >290 ml/m² (Sorptive capacity), cleanroom manufactured.

Applications

- Wiping and cleaning surfaces, equipment and parts.
- Spill control.
- Applying and removing lubricants, adhesives, residues and other solutions including disinfectants.
- Cleaning with solvents such as isopropyl alcohol (IPA), ethanol, acetone, and degreasers.
- Lining trays for holding, protecting, drying and storing of parts, equipment and devices.

Features & Benefits

- Constructed from a polyester / cellulose nonwoven creating a durable wiper ideal for spill control, cleaning, and solution application.
- Manufactured to provide a wiper suitable for general cleaning and wiping.
- Excellent chemical resistance for compatibility with a variety of solutions.
- Meets USP <797> and USP <800> wiper requirements.
- Autoclave safe.
- Individually lot coded for ease of traceability and quality control.

Cleanroom Environment

- ISO Class 5 – 8
- Class 100 – 100,000
- EU Grade B – D

Shelf Life

- Non-Sterile (Dry) – 5 years from date of manufacture

Products

| Number | Description | Packaging |
|-------------|------------------------|----------------|
| TW-2256A-9 | 23x23cm (9"x9") dry | 300 wipers/bag |
| TW-2256A-12 | 31x31 cm (12"x12") dry | 150 wipers/bag |
| TW-2257A-12 | 20x31cm (8"x12") dry | 100 wipers/bag |
| TW-2257A-24 | 20x61 cm (8"x24") dry | 100 wipers/bag |

Physical/Performance Characteristics

| Test Item | Test Standard/Tools/Unit | Specification |
|------------------|----------------------------------|--|
| Color | White | White |
| Single weight | SOP-F105 | 57,00±10 g/m ² |
| Thickness | Thickness gauge | 0.25±0.05 mm |
| Length | Steel rule | ±10 mm |
| Width | Steel rule | ±10 mm |
| Absorption (DIW) | IEST-RP-CC004.3\8.1 | >290 mL/m ² <1S |
| LPC (>=0.5 µm) | Count/cm ² | 20000 (200x10 ⁶ /m ²) |
| APC (>=0.3 µm) | Count/ft ² /min (MAX) | <6000 (60x10 ⁶ /m ²) |
| APC (>=0.5 µm) | Count/ft ² /min (MAX) | <5000 (50x10 ⁶ /m ²) |
| APC (>=5.0 µm) | Count/ft ² /min (MAX) | <500 (5x10 ⁶ /m ²) |

Test Methods

A – "Evaluating Wiping Materials Used in Cleanroom and Other Controlled Environments," IEST-RP-CC004.3, Institute for Environmental Sciences and Technology, Rolling Meadows, IL, 2004; www.iest.org.

B – E2090-12, "Standard Test Method for Size-Differentiated Counting of Particles and Fibers Released from Cleanroom Wipers Using Optical and Scanning Electron Microscopy," ASTM International, West Conshohocken, PA, 2012; www.astm.org.

Industries Applications

Aerospace
Animal Laboratory
Biologics
Cleanroom Design/Build
Compounding Pharmacies
Data Storage
Facilities Maintenance
Industrial
Laboratory
Medical Device
Microelectronics
Pharmaceutical
Printing/Graphics
Semiconductor

ISO 14644-1 Clean Standards

| | Class | Maximum Particles/m ³ | | | | | | FED STD 209E equivalent |
|-----------------|-------|----------------------------------|----------|----------|------------|-----------|---------|-------------------------|
| | | >=0.1 µm | >=0.2 µm | >=0.3 µm | >=0.5 µm | >=1 µm | >=5 µm | |
| LEAST STRINGENT | ISO 1 | 10 | 2 | | | | | |
| | ISO 2 | 100 | 24 | 10 | 4 | | | |
| | ISO 3 | 1,000 | 237 | 102 | 35 | 8 | | Class 1 |
| | ISO 4 | 10,000 | 2,370 | 1,020 | 352 | 83 | | Class 10 |
| | ISO 5 | 100,000 | 23,700 | 10,200 | 3,520 | 832 | 29 | Class 100 |
| MOST STRINGENT | ISO 6 | 1,000,000 | 237,000 | 102,000 | 35,200 | 8,320 | 293 | Class 1,000 |
| | ISO 7 | | | | 352,000 | 83,200 | 2,930 | Class 10,000 |
| | ISO 8 | | | | 3,520,000 | 832,000 | 29,300 | Class 100,000 |
| | ISO 9 | | | | 35,200,000 | 8,320,000 | 293,000 | Room Air |

Minimum Apparel & Wipe Recommendations

| | | ISO 8 (Class 100,00) | ISO 7 Class (10,000) | ISO 6 (Class 1,000) | ISO 5 (Class 100) | ISO 4 (Class 10) |
|----------------------|---|-------------------------|-------------------------|------------------------|----------------------|---------------------|
| Beard Cover |  | ✓ | ✓ | ✓ | ✓ | ✓ |
| Face Mask |  | | | | ✓ | ✓ |
| Booties |  | | | ✓ | ✓ | ✓ |
| Coverall |  | | | ✓ | ✓ | ✓ |
| Gloves |  | | | ✓ | ✓ | ✓ |
| Hair Cover |  | ✓ | ✓ | ✓ | ✓ | ✓ |
| Hood |  | | | | ✓ | ✓ |
| Lab Coat |  | ✓ | ✓ | | | |
| Sealed Edge Wipes | | | | | | ✓ |
| Polyester Knit Wipes | | | | | ✓ | |
| Poly/Cellulose Wipes | | ✓ | ✓ | ✓ | ✓ | |