

# MiracleWipe® Wipers

Strong, highly adsorbent nylon wipers  
for general wiping in Class 100 to 1,000  
environments

## Description

MiracleWipe® is made from 100% continuous-filament nylon. The double-knit construction, texture and body of the nylon filament give the wiper excellent softness and superior strength. MiracleWipe® is cleanroom laundered and processed to provide an ultraclean, highly adsorbent wiper ideal for critical cleanroom applications.

## Features

- 100% synthetic fiber (double-knit nylon)
- Continuous-filament, no-run interlock pattern
- Laundered and packaged at ITW Texwipe's Cleanroom Products Manufacturing Center
- Solvent-safe Bag-Within-A-Bag® cleanroom packaging
- Statistical quality control

## Benefits

- Excellent tensile strength, elasticity and durability
- Ultralow particulate generation and low extractable levels help prevent product and cleanroom contamination
- Soft, nonabrasive surface
- Lot-to-lot traceability

## Applications

- Superior for spill control and general wiping in critical environments
- Excellent for cleaning and polishing metallic and nonmetallic magnetic media disk surfaces
- Ideal for cleaning sensitive optical and photomask surfaces
- Abrasive surface cleaning

## Products

TX Number	Description	Packaging
<b>TX4004</b>	MiracleWipe® 4" x 4" nominal (10 cm x 10 cm) nylon wipers	600 wipers/bag, 4 inner bags of 150 wipers; 8 bags/case
<b>TX4009</b>	MiracleWipe® 9" x 9" nominal (23 cm x 23 cm) nylon wipers	150 wipers/bag, 3 inner bags of 50 wipers; 8 bags/case
<b>TX4012</b>	MiracleWipe® 10" x 12" nominal (25 cm x 31 cm) nylon wipers	200 wipers/bag, 4 inner bags of 50 wipers; 4 bags/case
<b>TX4018</b>	MiracleWipe® 14" x 18" nominal (36 cm x 46 cm) nylon wipers	100 wipers/bag, 2 inner bags of 50 wipers; 4 bags/case

**ITW Texwipe®**

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# MiracleWipe® Wipers

TX4004 TX4009 TX4012 TX4018

## Performance Characteristics

Property	Typical Value	Test Method*
Basis weight	170 g/m <sup>2</sup>	TM2: The Determination of Basis Weight
Absorbency		
Sorbptive capacity	530 mL/m <sup>2</sup>	TM3: Absorbency and Rate of Absorbency of Wipers
Sorbptive rate	3 seconds	TM3: Absorbency and Rate of Absorbency of Wipers
Surface resistivity	1.7 x 10 <sup>12</sup> ohms (1.7 x 10 <sup>13</sup> ohms/sq)	TM14: The Determination of Surface Resistivity of Fabrics and Other Thin, Flat Materials (Adapted from EOS/ESD-S11.11-1993)

## Contamination Characteristics

Property	Typical Value	Test Method*
Particles and fibers		
Particles 0.5-5.0 µm	22 x 10 <sup>6</sup> particles/m <sup>2**</sup>	ASTM E 2090-00: Standard Test Method for Size-Differentiated Counting of Particles and Fibers Released from Clean Room Wipers Using Optical and Scanning Electron Microscopy
5.0-100 µm	625,000 particles/m <sup>2**</sup>	ASTM E 2090-00: Standard Test Method for Size-Differentiated Counting of Particles and Fibers Released from Clean Room Wipers Using Optical and Scanning Electron Microscopy
Fibers: >100 µm	5,000 fibers/m <sup>2**</sup>	ASTM E 2090-00: Standard Test Method for Size-Differentiated Counting of Particles and Fibers Released from Clean Room Wipers Using Optical and Scanning Electron Microscopy
Nonvolatile residue		
IPA extractant	0.35 g/m <sup>2</sup>	TM1: Matter Extractable from Wipers and Other Materials
DIW extractant	0.67 g/m <sup>2</sup>	TM1: Matter Extractable from Wipers and Other Materials
Ions		
Sodium	0.22 ppm	TM12: The Determination of Ions in Wipers and Other Materials by Capillary Ion Analysis (CIA) Technique
Potassium	0.75 ppm	TM12: The Determination of Ions in Wipers and Other Materials by Capillary Ion Analysis (CIA) Technique
Chloride	3.00 ppm	TM12: The Determination of Ions in Wipers and Other Materials by Capillary Ion Analysis (CIA) Technique

**Note:** The data in this table represent typical analyses of these wipers at the time of publication. These are not specifications.  
Texwipe continually refines both its processes and its products.

\*Texwipe test procedures available upon request. ASTM procedure available for purchase at [www.astm.org](http://www.astm.org).

\*\*ASTM E 2090 provides a more sensitive test and a more complete measurement of particles and fibers than other standard test methods.