

## WILLBURGER GmbH Kreativität & Handel

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# MiracleWipe® Wipers

Strong, highly adsorbent nylon wipers for general wiping in ISO Class 5-6 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	Package
TX4004	MiracleWipe® 4" x 4" nominal (10 cm x 10 cm) nylon wipers	600 wipers/bag, 4 inner bags of 150 wipers; 8 bags/case
TX4009	MiracleWipe® 9" x 9" nominal (23 cm x 23 cm) nylon wipers	150 wipers/bag, 3 inner bags of 50 wipers; 8 bags/case
TX4012	MiracleWipe® 10" x 12" nominal (25 cm x 31 cm) nylon wipers	200 wipers/bag, 4 inner bags of 50 wipers; 4 bags/case
TX4018	MiracleWipe® 14" x 18" nominal (36 cm x 46 cm) nylon wipers	100 wipers/bag, 2 inner bags of 50 wipers; 4 bags/case

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# MiracleWipe® Wipers TX4004 TX4009 TX4012 TX4018

## Performance Characteristics

Property	Typical Value	Test Method*
Basis weight	180 g/m <sub>2</sub>	1, TM2
Absorbency		
Sorptive capacity	470 mL/m <sub>2</sub>	1, TM3
Sorptive rate	<1 second	1, TM3

## Contamination Characteristics

Property	Typical Value	Test Method*
Particles and fibers		
Particles 0.5-5.0 µm	8 x 10 <sup>6</sup> particles/m <sub>2</sub>	1, 2, TM15
5.0-100 µm	58,000 particles/m <sub>2</sub>	1, 2, TM15
Fibers: >100 µm	844 fibers/m <sub>2</sub>	1, 2, TM15
Nonvolatile residue		
IPA extractant	0.03 g/m <sub>2</sub>	1, TM1
DIW extractant	0.24 g/m <sub>2</sub>	1, TM1
Ions		
Sodium	0.89 ppm	1, TM18
Potassium	0.21 ppm	1, TM18
Chloride	0.10 ppm	1, TM18

### \*Test Methods

1 – “Evaluating Wiping Materials Used in Cleanroom and Other Controlled Environments,” IEST-RP-CC 004.3, Institute for

Environmental Sciences and Technology, Rolling Meadows, IL 2004; www.iest.org.

2 – “Standard Method for Size-Differentiated Counting of Particles and Fibers Released from Clean Room Wipers Using Optical and Scanning Electron Microscopy,” E2090-00, ASTM International, West Conshohocken, PA, 2000; www.astm.org.