

TW Texwipe®



Dry and Pre-wetted **Cleanroom Wipers**

*From the leading manufacturer
of wipers for cleanrooms and for
controlled and sterile environments.*

ITW Texwipe® History

More than 40 years ago, The Texwipe Company — now ITW Texwipe® — developed the first family of wipers for contamination control for the expanding electronics industry. The semiconductor industry has continually advanced its technology, and thereby increased its requirements for cleaner processing environments. ITW Texwipe has continued to meet these requirements with technical innovation.

ITW Texwipe evolved its products and services to meet the needs of other industries including pharmaceuticals, medical equipment and devices, aerospace, nanotechnology, biotechnology, research and specialty segments of industrial manufacturing.

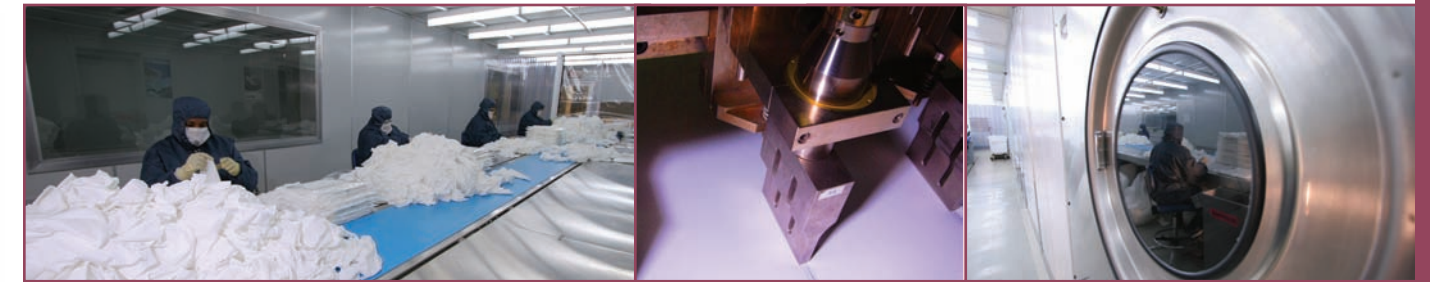
ITW Texwipe provides the leading products in several families of contamination control consumables:

- Dry wipers
- Pre-wetted wipers
- Sterile wipers
- Sterile alcohol
- Cleanroom swabs
- Cleanroom stationery
- Cleanroom mops



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Product Development

ITW Texwipe is committed to supplying the highest quality, most consistent cleanroom consumable products. We invest in technology, innovation and quality to create and maintain state-of-the-art systems. The results are new, improved cost-effective products. From Vectra® processed, sealed-border wipers to CleanPak® pre-wetted wipers to CleanTips® swabs, ITW Texwipe achieves superior product quality and consistency by utilizing technological innovations, including quality analysis and intricate test methodologies.

Wiper Engineering

ITW Texwipe maintains a staff of contamination control and fabric experts to develop and qualify the most effective wiper materials for your applications.

Metrology

ITW Texwipe developed many of the standard test methods used in the cleanroom wiper industry. We pioneered the use of scanning electron microscopy and automated liquid particle counting to assess releasable fibers and particles. Additionally, ITW Texwipe uses ion chromatography to measure ion concentration, and FTIR and UV to identify residual organic components.

Manufacturing

ITW Texwipe developed the key manufacturing breakthroughs in cleanroom wipers: from the double-sided twill bias-cut cotton wipers in the early 1960's, to the cleanroom-laundered polyester wipers in the 1970's. The 1980's introduced the patented, sealed-border of the cleanroom laundered Alpha® 10 knit wipers, and in 1998, the unique Vectra® manufacturing process was instituted.

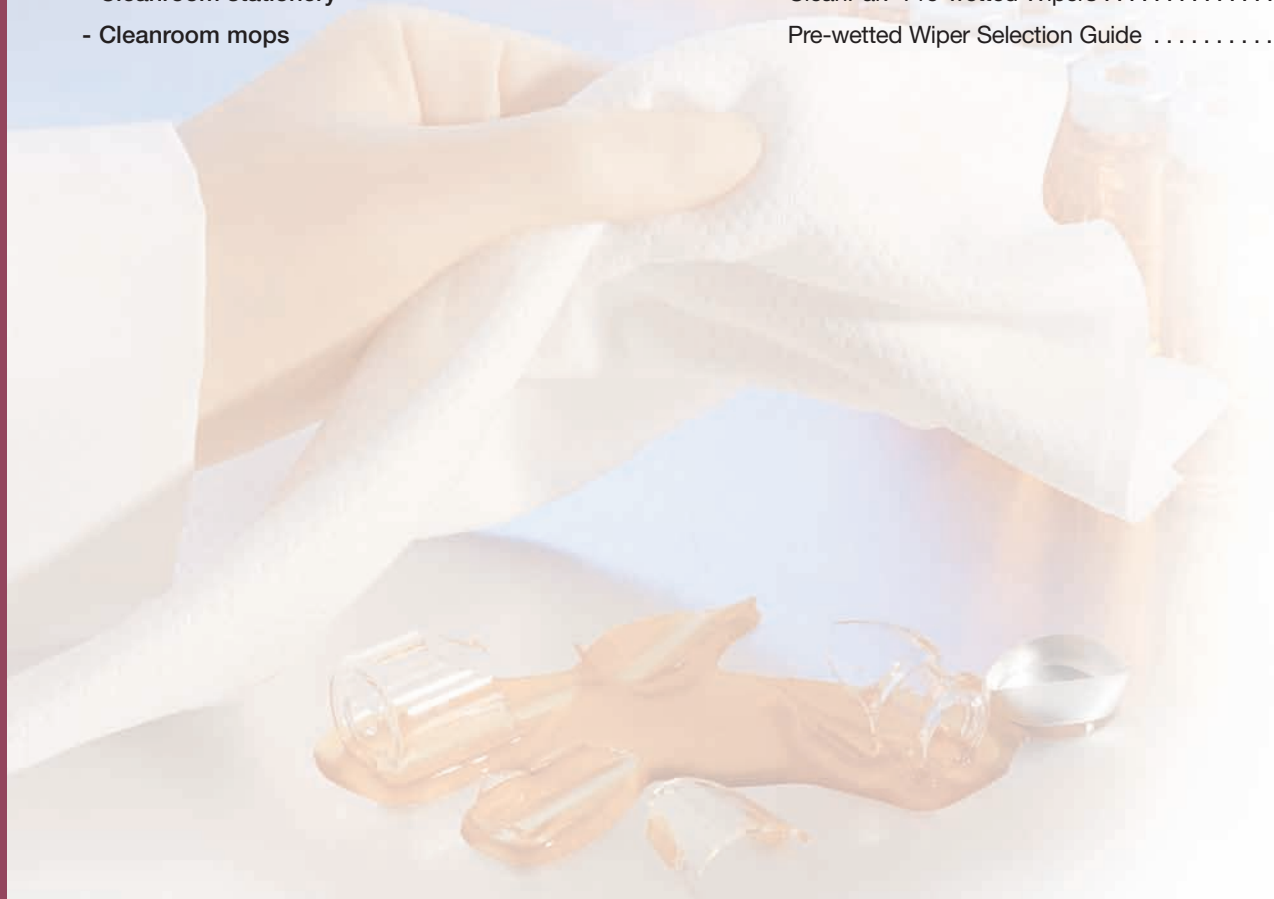
The Vectra process is an automated, continuous cleaning process. It eliminates the wiper abuse from standard cleanroom laundries, and its automated machine vision inspects 100% of the wipers without the need for human interaction. Vectra-processed wipers are the cleanest and most consistent wipers for the most demanding cleanroom requirements.

Technical Support

ITW Texwipe provides technical and practical support directly to customers and through our global distributor partners. We offer cleaning recommendations and facility audits to ensure our customers have the most effective cleaning protocols for optimum operations.

ITW Texwipe also provides tools and technical expertise through literature and instructional posters. Our experience has led to the development of simple, straightforward guides for standard contamination control practices.

Please contact us at 1-800-TEXWIPE or at www.texwipe.com for more information about our products and services.



Fabric Primer for Cleanrooms

Engineering cleanroom wipers starts with the development of the fabric.

Knitted

Knit fabric consists of interlacing loops of yarn which offers several design options — knit pattern, yarn chemistry and yarn structure. Knit wipers provide great cleaning efficiency and good abrasion resistance, chemical tolerance and sorption. They are the primary wipers used in ISO Class 3-6 cleanrooms.

Nonwoven

The nonwoven family includes patterned polymer films, mechanically intertwined or chemically bonded fibers and composites of multiple layers. Nonwoven wipers offer a wide range of performance properties. They tend to be less expensive and are good for areas that can tolerate higher levels of releasable particles and fibers.

Fibers and Yarn

Fibers are classified as either staple or filament. A staple fiber is a short, manufactured strand, usually 1" – 3" long. Staple yarn is spun staple fiber. Staple fibers and yarn tend to break and release particles from the wiper.

Filament fibers are continuous strands, like polyester, nylon and silk. Filament yarn consists of bundles of filament fibers. Filament yarn is durable, so it releases fewer particles. Most cleanroom wipers are based on polyester yarn due to its' relative ease of use, availability, chemical resistance and autoclavability.



Dry Wiper Selection Guide

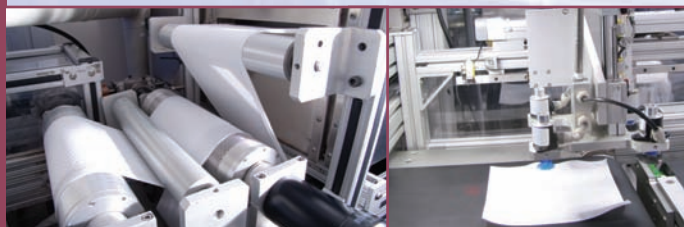
Dry Wiper Selection Guide

Cleanroom Class	Optimum Wiper Type	Page	ITW Texwipe Wipers	Attributes
ISO Class 3–5* <i>Formerly 1–100</i>	Sealed-border wipers Polyester knits	4	Vectra® Alpha® 10	Lowest particle, fiber, NVR and ionic levels. Wiper borders are sealed; product is Vectra® processed or cleanroom laundered and packaged.
		4	Vectra® AlphaSorb® 10	
		5	Vectra® Alpha® MD	
		5	Vectra® Honeycomb® 10	
		5	Vectra® Quantum® 100	
		5	Vectra® Alpha® Nu	
		5	Vectra® Quantex™	
		5	TexTra™ 10	
		5	TexTube®	
			Sealed-edge wipers Polyester knits	
ISO Class 5–8* <i>Formerly 100–100,000</i>	Cut-edge wipers Polyester and nylon knits	6	AlphaWipe®	Wipers are cut, laundered and cleanroom packaged to provide low particle, fiber, NVR and ionic levels; minimal release of fibers.
		7	AlphaSorb® HC	
		7	TexTra™	
		7	AlphaLite®	
		7	MiracleWipe®	
	Nonwoven wipers Hydroentangled polyester/cellulose blends	8	TechniCloth®	Efficient wipers with high sorption.
9	TechniCloth® II			
9	VersaWipe®			
9	BlueWipe®			
	Specialty wipers Hydroentangled polyester	10	Absorbond®	Lowest NVR available with a soft, optical-grade texture.
	Cotton	10	TexWipe® NuCotton®	Excellent heat resistance, sorption and ESD properties.
	Polypropylene/ cellulose composite	11	BetaWipe™	Ideal for sensitive surfaces. High sorption, acid tolerant.
	Foam	11	FoamWipe™	Soft, high sorption.

*These are general guidelines for wiper selection. Please contact your Texwipe representative for additional details.

Vectra® Processed Wipers – The Standard for ISO Class 3 Cleanrooms

ITW Texwipe advanced the industry standard by developing the Vectra® process for 9" x 9" wipers. Vectra is a continuous, automated cleaning process with in-line process control for the best quality and most consistent wipers. Vectra also incorporates machine vision for consistent 100% inspection and robotic stacking. Vectra-processed, sealed-border wipers feature the highest level of contamination control without the recontamination potential of conventional cleanroom laundries.



Sealed-Border Wipers

ITW Texwipe invented and patented the sealed-border wiper to prevent the release of particles and fibers. These wipers have set the standard as the cleanest, most effective wipers for ISO Class 3 cleanrooms, mini-environments and semiconductor processing equipment. All our sealed-border wipers are constructed of 100% continuous-filament double-knit polyester.

Alpha® 10

Premium sealed-border polyester wiper for critical cleaning. Optimum balance of wiping efficiency, abrasion resistance and sorption.

TX1010 Vectra® Alpha® 10 100 wipers/bag
9" x 9" nominal 2 inner bags of 50 wipers
(23 cm x 23 cm) 10 bags/case

TX1012 Alpha® 10 (laundered) 100 wipers/bag
12" x 12" nominal double bagged
(31 cm x 31 cm) 10 bags/case

Also available as sterile wipers and in CleanPaks pre-wetted with IPA.

AlphaSorb® 10

Premium two-ply, sealed-border polyester wiper for high sorption. Abrasion-resistant wiper with soft, flexible hand, designed to pick up large amounts of liquid and to apply chemicals. Ideal for use when one wiper is needed for multiple environments.

TX1050 Vectra® AlphaSorb® 10 100 wipers/bag
9" x 9" nominal 2 inner bags of 50 wipers
(23 cm x 23 cm) 10 bags/case

TX1052 AlphaSorb® 10 (laundered) 100 wipers/bag
12" x 12" nominal 2 inner bags of 50 wipers
(31 cm x 31 cm) 6 bags/case

Also available as sterile wipers and in CleanPaks pre-wetted with IPA.



Vectra® Alpha® MD

Sealed-border microdenier polyester wiper with excellent sorption, abrasion resistance and wiping efficiency. Extra soft hand is ideal for optics and high polish surfaces.

TX8670 Vectra® Alpha® MD 100 wipers/bag
9" x 9" nominal 2 reclosable bags of 50 wipers
(23 cm x 23 cm) 10 bags/case

Vectra® Honeycomb® 10

Sealed-border polyester wiper for grit and residue removal. Unique knit pattern for scrubbing and for grit encapsulation. Excellent sorption and abrasion resistance.

TX1060 Vectra® Honeycomb® 10 100 wipers/bag
9" x 9" nominal 2 inner bags of 50 wipers
(23 cm x 23 cm) 10 bags/case

Also available as mop covers.

Vectra® Quantum® 100

Sealed-border, polyester wiper with softer feel and higher sorption than Alpha® 10. Good abrasion resistance.

TX1029 Vectra® Quantum® 100 100 wipers/bag
9" x 9" nominal 2 inner bags of 50 wipers
(23 cm x 23 cm) 10 bags/case

Also available as CleanPaks pre-wetted with IPA.

Vectra® Alpha® Nu

Sealed-border 100% continuous-filament polyester. Absorption characteristics of a cellulose wiper with the cleanliness of a polyester wiper. No barrier film left behind, low particle counts and NVRs and immediate adsorption of liquids.

TX1069 Vectra® Alpha® Nu 150 wipers/bag
9" x 9" nominal 2 bags of 75 wipers
(23 cm x 23 cm) 10 bags/case

Vectra® Quantex™

Sealed-border, polyester wiper for all-purpose critical cleaning with good sorption and good abrasion resistance.

TX1080 Vectra® Quantex™ 150 wipers/bag
9" x 9" nominal 2 inner bags of 75 wipers
(23 cm x 23 cm) 10 bags/case

Also available as CleanPaks pre-wetted with IPA.

TexTra™ 10

Sealed-border, polyester wiper for high sorption. Designed to pick up large amounts of liquid and to apply chemicals. Good abrasion resistance, ideal for use when one wiper is needed for multiple environments.

TX2450 TexTra™ 10 (laundered) 100 wipers/bag
9" x 9" nominal 2 inner bags of 50 wipers
(23 cm x 23 cm) 10 bags/case

TX2452 TexTra™ 10 (laundered) 100 wipers/bag
12" x 12" nominal 2 inner bags of 50 wipers
(31 cm x 31 cm) 6 bags/case

Also available as sterile wipers.

TexTube®

Tubular-knit, high-sorption, two-ply polyester wiper with two sealed edges. Excellent for use as a clean work surface or for transporting sensitive parts. Extremely high sorption and low particle and fiber release.

TX1070 TexTube® (laundered) 100 wipers/bag
9" x 9" nominal 2 inner bags of 50 wipers
(23 cm x 23 cm) 10 bags/case

Sealed-Edge ISO Class 3-5

Sealed-Edge Wipers

ThermaSeal™ 60 wipers feature sealed edges for lower fiber release than cut-edge wipers at a lower cost than sealed-border wipers. They are constructed of 100% continuous filament, double-knit polyester. They are laundered and packaged in a state-of-the-art ISO Class 4 cleanroom. ThermaSeal 60 wipers are low in releasable particles, NVR's and ionic contaminants.

ThermaSeal™ 60

Sealed-edge polyester, all-purpose wiper for use in cleanrooms where fiber and particle control is important.

TX2064	4" x 4" nominal (10 cm x 10 cm)	300 wipers/bag 2 inner bags of 150 wipers 20 bags/case
TX2069	9" x 9" nominal (23 cm x 23 cm)	150 wipers/bag 2 inner bags of 75 wipers 10 bags/case



Knit Polyester and Nylon Wipers

ITW Texwipe's cut-edge knit wipers are used in critical environments where contamination control requirements are paramount. They are ideally suited for cleaning and wiping applications in ISO Class 5 cleanroom environments. Constructed of 100% polyester or nylon, these wipers offer low particle release and low levels of extractables. Their superior strength allows for rigorous wiping with minimal fiber release.

AlphaWipe®

Premium cut-edge, all-purpose polyester wiper for critical environments.

TX1003	11" x 12" nominal (28 cm x 31 cm)	250 wipers/bag 2 inner bags of 125 random-packed wipers 6 bags/case
TX1004	4" x 4" nominal (10 cm x 10 cm)	300 wipers/bag 2 inner bags of 150 wipers 20 bags/case
TX1009	9" x 9" nominal (23 cm x 23 cm)	150 wipers/bag 2 inner bags of 75 wipers 10 bags/case
TX1009B	9" x 9" nominal (23 cm x 23 cm)	150 wipers/bag bulk packed, 2 inner bags of 75 wipers 10 bags/case
TX1013	12" x 12" nominal (31 cm x 31 cm)	75 wipers/bag double bagged 10 bags/case
TX1024*	24" x 44" nominal (60 cm x 112 cm)	75 covers/bag 10 bags/case
TX1024W*	30" x 40" nominal (76 cm x 102 cm)	6 covers/bag 10 bags/case

Also available as sterile wipers and in CleanPaks pre-wetted with IPA.

*TX1024 and TX1024W are convenient for use as mop and bench/tool covers.

Knit Polyester and Nylon ISO Class 5-8



AlphaSorb® HC

Large, cut-edge two-ply polyester wiper for the highest sorption capacity.

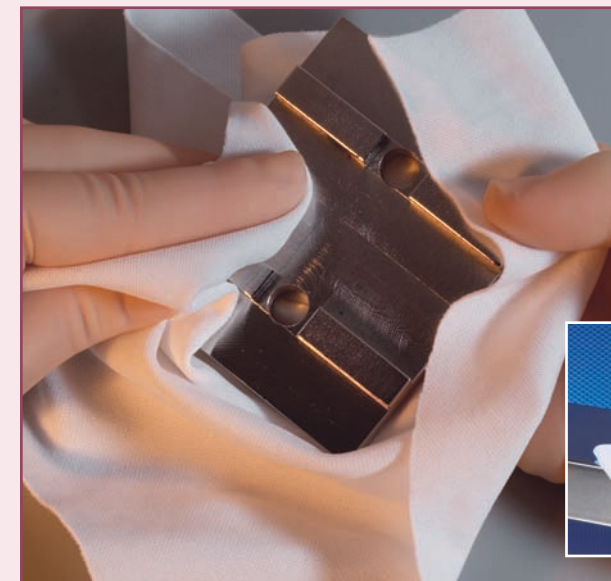
TX2412	12" x 12" nominal (31 cm x 31 cm)	100 wipers/bag 2 inner bags of 50 wipers 6 bags/case
TX2418	18" x 18" nominal (46 cm x 46 cm)	100 wipers/bag 2 inner bags of 50 wipers 3 bags/case

TexTra™

Cut-edge, single-ply polyester wiper with sorption similar to two-ply polyester wipers and good abrasion resistance.

TX2424	12" x 12" nominal (31 cm x 31 cm)	100 wipers/bag 2 inner bags of 50 wipers 8 bags/case
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Also available as sterile wipers and pre-wetted with TexPure®.



AlphaLite®

Cut-edge light-weight, polyester wiper for general-purpose wiping in critical environments.

TX1008	9" x 9" nominal (23 cm x 23 cm)	150 wipers/bag double-bagged 6 bags/case
TX1008B	9" x 9" nominal (23 cm x 23 cm)	150 wipers/bag double-bagged 6 bags/case

MiracleWipe®

Cut-edge double-knit nylon wiper with inherent toughness, sorption, excellent abrasion resistance, high tensile strength, elasticity and durability.

TX4004	4" x 4" nominal (10 cm x 10 cm)	600 wipers/bag 4 inner bags of 150 wipers 8 bags/case
TX4009	9" x 9" nominal (23 cm x 23 cm)	150 wipers/bag 3 inner bags of 50 wipers 8 bags/case
TX4012	10" x 12" nominal (25 cm x 31 cm)	200 wipers/bag 4 inner bags of 50 wipers 4 bags/case
TX4018	14" x 18" nominal (36 cm x 46 cm)	100 wipers/bag 2 inner bags of 50 wipers 4 bags/case



Blended Nonwoven ISO Class 5-8



Blended Nonwoven Wipers

ITW Texwipe offers a family of blended general purpose nonwoven wipers for cleaning and spill control in critical environments. TechniCloth®, TechniCloth® II, VersaWipe® and BlueWipe® all consist of hydroentangled cellulose and polyester fibers. This blend combines the high sorption of natural cellulose and the cleanliness and strength of polyester.

These cleanroom wipers are ideal for ISO Class 5-8 cleanrooms, gowning areas, isolators, anterooms, and buffer areas. Texwipe offers these wipers in several forms: dry, pre-wetted, sterile wet and dry, and as mop covers.

Dry wipers will completely dry a surface and leave no film layer. Pre-wetted wipers can dispense a film of the desired solvent, disinfectant or other surface treatment.

■ TechniCloth®

TechniCloth offers the lowest level of releasable ions and non-volatile contaminants, contains no chemical binders and tolerates most standard solvents. Its blend of 55% cellulose and 45% polyester provides the optimum balance of sorption, durability and cleanliness.

TX604	4" x 4" nominal (10 cm x 10 cm)	1,200 wipers/bag 4 inner bags of 300 wipers 10 bags/case
TX606	6" x 6" nominal (15 cm x 15 cm)	600 wipers/bag 2 inner bags of 300 wipers 10 bags/case
TX609	9" x 9" nominal (23 cm x 23 cm)	300 wipers/bag double-bagged 10 bags/case
TX612	12" x 12" nominal (31 cm x 31 cm)	150 wipers/bag double-bagged 10 bags/case

Also available as sterile wipers, CleanPaks pre-wetted with IPA and mop covers.



Blended Nonwoven ISO Class 5-8



■ TechniCloth® II

TechniCloth II features Texwipe's proprietary ULP (ultra-low particulate) treatment, so it releases significantly fewer particles and fibers than the standard TechniCloth wipers. Its blend of 55% cellulose and 45% polyester provides the optimum balance of sorption, durability and cleanliness.

TX1109	9" x 9" nominal (23 cm x 23 cm)	300 wipers/bag double-bagged 10 bags/case
TX1112	12" x 12" nominal (31 cm x 31 cm)	150 wipers/bag double-bagged 10 bags/case
TX1118	18" x 18" nominal (46 cm x 46 cm)	75 wipers/bag double-bagged 10 bags/case

■ VersaWipe®

VersaWipe contains no chemical binders and tolerates most standard solvents. Its blend of 55% cellulose and 45% polyester provides the optimum balance of sorption, durability and cleanliness.

TX624	4" x 4" nominal (10 cm x 10 cm)	1,200 wipers/bag 4 inner bags of 300 wipers 10 bags/case
TX629	9" x 9" nominal (23 cm x 23 cm)	300 wipers/bag double bagged 10 bags/case
TX622	12" x 12" nominal (31 cm x 31 cm)	150 wipers/bag double-bagged 10 bags/case

■ BlueWipe®

Blue utility wiper features excellent durability, good sorption and lower extractables. It is used for general wiping and spill control in less critical environments and industrial applications. The wiper indicates that it is wet by changing color from light to dark blue.

TX512	12" x 12" (31 cm x 31 cm)	50 wipers/bag C-folded wipers with color indication feature 10 bags/case
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Specialty ISO Class 5-8



Specialty Wipers

ITW Texwipe's continued development of cleanroom wipers has resulted in a family of specialty wipers for specific applications. These wipers are:

- Absorbond®: Soft, hydroentangled polyester wiper for optics
- BetaWipe™: Composite wiper for acids, etchants and chemical spills
- FoamWipe™: Polyurethane foam wiper
- NuCotton®: Cotton twill-pattern wiper
- TexWipe®: Double-sided cotton twill wiper

ITW Texwipe continues to work with industry leaders to develop new wipers, new services and new technology for contamination control.



■ **Absorbond®**
Hydroentangled polyester wiper with a unique combination of features: soft, non-abrasive, very low extractables, chemical tolerance, and high sorption.

Absorbond wipers are excellent for many applications: cleaning and handling optical-grade components, low-contamination work surfaces, protective packaging for delicate components, applications requiring high purity, and sorption of alcohol and solvents.

TX404	4" x 4" nominal (10 cm x 10 cm)	1,200 wipers/bag 4 inner bags of 300 wipers 10 bags/case
TX409	9" x 9" nominal (23 cm x 23 cm)	300 wipers/bag 2 inner bags of 150 wipers 10 bags/case

■ **TexWipe®**
Strong cotton wiper, double-sided, bias cut to minimize fraying. Ideal for high temperature applications, spill removal, work surfaces and static dissipative applications.

TX304	4" x 4" nominal (10 cm x 10 cm)	1,200 wipers/bag 4 inner bags of 300 wipers 10 bags/case
TX306	6" x 6" nominal (15 cm x 15 cm)	600 wipers/bag 2 inner bags of 300 wipers 10 bags/case
TX309	9" x 9" nominal (23 cm x 23 cm)	300 wipers/bag 2 inner bags of 150 wipers 10 bags/case
TX312	12" x 12" nominal (31 cm x 31 cm)	150 wipers/bag double-bagged 10 bags/case



■ **NuCotton®**
Good for high temperature applications, spill removal, static dissipative and less critical cleaning applications.

TX329	9" x 9" nominal (23 cm x 23 cm)	300 wipers/bag 1 inner bag of 300 wipers 10 bags/case
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■ **BetaWipe™**
Composite wiper of thermally bonded polypropylene, cellulose and polypropylene in a sandwich structure. Designed for the removal of acids, etchants and chemical spills in controlled environments. Ideal for cleaning and polishing instruments.

TX2009	9" x 9" nominal (23 cm x 23 cm)	100 wipers/bag 2 inner bags of 50 wipers 10 bags/case
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■ **FoamWipe™**
Open-cell polyurethane wiper with excellent solvent capacity. Used as a clean replacement for cellulose sponges and as a padded work surface.

TX704	6" x 9" x 1/8" nominal (15 cm x 23 cm x 3 mm)	60 wipers/bag double-bagged 8 bags/case
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Product and Customer Support

ITW Texwipe is the technical and market leader in cleanroom wipers. We provide innovative materials and services for cleaning critical environments in the electronics, pharmaceutical and medical device industries. To support your needs, we provide –

- On-site Facility Audits
- Training Posters
- Technical Article Reprints
- Product Line Brochures
- Technical Datasheets and Sample Binders
- Test Methods
- Website



Wiper Cleanliness Chart

Technical Hotline 1-800-TEXWIPE ext. 212

Cleanroom Class	Optimum Wiper Type	ITW Texwipe Wipers	Releasable Particles and Fibers			Non-Volatile Residue		Ion Levels			Performance Characteristics
			0.5–5.0 μm Particles* 10 ⁶ /m ²	5.0–100 μm Particles* /m ²	>100 μm Fibers* /m ²	NVR IPA (g/m ²)	NVR DIW (g/m ²)	Sodium (ppm)	Potassium (ppm)	Chloride (ppm)	Absorbency mL/m ²
ISO Class 3–5 Formerly 1–100	Sealed Border	Vectra® Alpha® 10	2.2	81,000	180	0.05	0.01	0.18	0.08	0.03	320
		Vectra® AlphaSorb® 10	2.8	180,000	250	0.06	0.02	0.18	0.13	0.04	540
		Vectra® Alpha® MD	7.0	155,000	350	0.07	0.03	0.80	0.11	0.14	320
		Vectra® Honeycomb® 10	1.8	88,000	220	0.06	0.02	0.30	0.09	0.06	360
		Vectra® Quantum® 100	3.0	145,000	140	0.05	0.02	0.25	0.08	0.08	385
		Vectra® Alpha® Nu	3.3	100,000	450	0.03	0.01	0.30	0.16	0.03	400
		Vectra® Quantex™	6.2	135,000	220	0.06	0.01	0.30	0.20	0.08	325
		TexTra™ 10	7.7	120,000	200	0.03	0.02	0.40	0.06	0.01	600
		TexTube®	3.5	160,000	105	0.12	0.04	0.11	0.16	0.26	780
	Sealed Edge	ThermaSeal™ 60	3.1	106,000	1100	0.05	0.01	0.30	0.12	0.06	350
ISO Class 5–8 Formerly 100–100,000	Cut Edge	AlphaWipe®	18	200,000	2,000	0.07	0.02	0.22	0.09	0.07	530
		AlphaSorb® HC**	10	400,000	500	0.09	0.02	0.10	0.10	0.09	680
		TexTra™	15	182,000	500	0.04	0.01	0.15	0.15	0.10	550
		AlphaLite®	10	152,000	1,400	0.06	0.01	0.15	0.03	0.10	350
		MiracleWipe®	15	200,000	2,000	0.35	0.67	0.22	0.50	0.50	530
	Nonwoven	TechniCloth®	123	2.1 x 10 ⁶	258,000	0.02	0.06	46.0	4.00	16.0	280
		TechniCloth® II	90	500,000	40,000	0.11	0.11	75.0	6.00	28.0	220
		VersaWipe®	71	1.0 x 10 ⁶	292,600	0.02	0.03	47.0	2.00	24.0	260
		BlueWipe®	200	4.0 x 10 ⁶	140,000	0.03	0.07	15.0	3.00	24.0	280
	Hydroentangled Polyester	Absorbond®	60	1.5 x 10 ⁶	23,000	0.01	0.005	7.00	2.00	5.00	210 [†]
	Cotton	TexWipe®	375	15 x 10 ⁶	80,000	0.35	0.20	50.0	2.00	4.00	250
	Foam	FoamWipe™	10	2.5 x 10 ⁶	8,500	2.79	1.28	93.0	ND	18.0	625 [†]
	Polypropylene/Cellulose Composite	BetaWipe™	500	5.0 x 10 ⁶	90,000	0.91	0.28	50.0	6.00	11.0	555

* ASTM E2090 provides a more sensitive test and a more complete measurement of particles and fibers than other standard test methods.

** 12" x 12" wipers tested. † Absorbency test performed using IPA. ND–Non Detected

CleanPak® Pre-wetted Wipers

CleanPaks feature cleanroom wipers pre-wetted with isopropyl alcohol (IPA) and deionized water (DIW). They provide more consistent cleaning than dry wipers and squirt bottles due to the optimum saturation level and the consistent concentration.

CleanPak® pre-wetted wipers offer several advantages:

- Reduced use of squirt bottles
- Fewer VOCs
- Safer to ship, store and use
- Easier to use

ITW Texwipe also offers sterile pre-wetted wipers and wipers with other solvents.



ITW Texwipe has developed a new reclosable bag for dry and pre-wetted wiper products. This innovative delivery system combines easy wiper access with an effective package to protect the integrity of the product during storage. The reclosable mechanism slides open easily for quick access to the internal security seal that keeps the wipers protected until ready for use.



Reclosable Bag

The new, reclosable packaging is available in small, large and gusseted bags for easy storage and use in the cleanroom.

FlexPack

Ideal for cleaning applications requiring minimum dispenser size. Pre-wetted wipers are withdrawn through an opening incorporating a resealable label to prevent solvent evaporation. Wipers are folded and stacked.



Fliptop Tub

Hinged, snap-down lid. Convenient for all technical cleaning requirements. Wipers are folded and stacked.

Canister

Handy dispensers for heavy-usage applications. Snap-down lid over a small opening seals canister. Wipers are perforated on a continuous roll for easy pull-up dispensing.

FlatPack

Convenient dispenser for pre-wetted, stacked wipers. Package incorporates resealable opening to prevent solvent evaporation.

What is a VOC?

One of the most common terms used across various industries is *VOC (Volatile Organic Compounds)*— as in *reduced VOC* and *VOC content*.

Emissions of VOCs, in and of themselves, do not necessarily give rise to health or environmental concerns. In many areas, however they react with oxides of nitrogen (NO_x) in the presence of heat and sunlight to form ground level ozone — the primary compound of “smog.” For that reason, they are regulated as “ozone precursors” under the Federal Clean Air Act and similar state laws.

In order to reduce ozone levels, federal and state agencies have developed regulations to reduce VOC emissions from a variety of sources, including products that contain solvents (e.g. IPA).

The use of CleanPak® pre-wetted wipers is an excellent way to reduce VOC emissions when compared to the use of squirt bottles and dry wipers.

CleanPaks not only reduce VOCs, but also eliminate the problems associated with purchasing, storing, filtering, and diluting solvents. CleanPaks also eliminate the maintenance of squirt bottles. This all adds up to savings for your organization.

Pre-wetted Wiper Selection Guide

Products / Wiper Dimensions	Solution				Substrate			Dispenser								ISO Cleanroom Class	
	100% IPA	70% IPA	10-9% IPA	6% IPA	TexPure®	Alpha® 10	AlphaSorb® 10	Quantex™	AlphaWipe®	TexTra™	TechniCloth®	Polypropylene	Canister	FlexPack	Fliptop Tub		Reclosable Bag
TX1034 4" x 4" (10 cm x 10 cm) 200 wipers		●							●							●	5-8
TX1036 6" x 6" (15 cm x 15 cm) 75 wipers		●							●							●	5-8
TX1039 9" x 9" (23 cm x 23 cm) 50 wipers		●							●							●	5-8
TX1041 9" x 11" (23 cm x 28 cm) 70 wipers		●									●					●	5-8
TX1045 6" x 8" (15 cm x 20 cm) 100 wipers		●									●	●					5-8
TX1048 8" x 5" (20 cm x 13 cm) 210 wipers				●							●			●			5-8
TX1051 9" x 11" (23 cm x 28 cm) 50 wipers		●									●			●			5-8
TX1057 9" x 9" (23 cm x 23 cm) 40 wipers			●			●										●	3-5
TX1065 9" x 11" (23 cm x 28 cm) 50 wipers		●									●			●			5-8
TX1082 9" x 9" (23 cm x 23 cm) 50 wipers	●							●								●	3-5
TX1084 9" x 9" (23 cm x 23 cm) 50 wipers		●						●								●	3-5
TX1086 9" x 9" (23 cm x 23 cm) 50 wipers				●				●								●	3-5
TX1088 12" x 12" (31 cm x 31 cm) 25 wipers					●				●							●	3-5
TX8385 9" x 9" (23 cm x 23 cm) 50 wipers			●						●						●		5-8
TX8398 9" x 11" (23 cm x 28 cm) 50 wipers				●						●				●			5-8
TX8410 9" x 9" (23 cm x 23 cm) 50 wipers	●					●										●	3-5
TX8415 9" x 9" (23 cm x 23 cm) 50 wipers				●		●										●	3-5
TX8442 6" x 9" (15 cm x 23 cm) 30 wipers			●						●					●			5-8
TX8488 9" x 11" (23 cm x 23 cm) 300 wipers				●							●					●	5-8

About the Different Substrates:

AlphaSat® with Vectra® Alpha® 10

Knitted 100% polyester sealed-border wiper for use in the most critical environments and **where abrasion resistance is required**. Vectra processing eliminates partial blooming of Oligomers commonly found in wipers pre-wetted with high concentrations of alcohol.

AlphaSat® with Vectra® AlphaSorb® 10

Two-ply, knitted 100% polyester sealed-border wiper for use in the most critical environments where spill control and absorbency are of paramount importance.

QuanSat™ with Vectra® Quantex™

Knitted 100% polyester sealed-border wiper for use in the most critical environments. Offers **good all around performance** including high abrasion resistance without sacrificing absorbency **at an economical price**. Vectra processing eliminates partial blooming of Oligomers commonly found in wipers pre-wetted with high concentrations of alcohol.

AlphaSat® with AlphaWipe®

Knitted 100% polyester cut-edge wiper for use in ISO Class 5 cleanroom environments requiring low particles, fibers, NVR and ions.

TexTra™ with TexPure®

Knitted 100% polyester cut-edge wiper with the liquid holding capacity of a two-ply wiper. Pre-wetted with TexPure®, a surfactant-free, alcohol-free concentrated cleaning solution. Formulated to remove CMP oxide slurry residue.

TechniSat® with TechniCloth®

Hydroentangled nonwoven 55% cellulose and 45% polyester blend wiper combines the highly absorbent properties of a natural fiber with the cleanliness, strength and durability of a synthetic wiper.

PolySat®

Durable polypropylene cut-edge wiper, good for surface cleaning.

About ITW Texwipe®

For over 40 years, ITW Texwipe has provided innovative technology and materials for cleaning critical environments. Cleanrooms are widely used in many industries, including pharmaceutical, medical device, semiconductor, data storage, automotive and aerospace.

As a global company, ITW Texwipe has corporate headquarters in North America, offices in Europe and Asia and manufacturing facilities in the United States and the Philippines.

Our worldwide network of distributors serves over 20,000 customers and is backed by our specialized technical support.

ITW Texwipe's cleaning and contamination control products include a complete line of sterile wipers, sterile alcohols, sealed-border wipers, sealed-edge wipers, pre-wetted wipers, swabs, TOC kits, cleanroom mopping systems, and cleanroom stationery and notebooks.

More detailed information about these or any other Texwipe products can be obtained by contacting your ITW Texwipe representative at 1-800-TEXWIPE or by visiting us online at www.texwipe.com

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ITW Texwipe®

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