Lab Pro Cleanroom Wiper Selection Guide



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Wiper Material

Polyester

Polyester wipes are 100% virgin, continuous-filament polyester in a double-knit, no-run interlock design with a laser cut, sealed edge. Recommended for use in cleanroom critical environments and a wide variety of applications including cleaning medical devices, electronics displays, instrument panels, semiconductors, and microelectronics products.

Poly-cellulose Blend

These general-purpose Spunlace non-woven wipes are constructed from a hydroentangled, non-woven blend of 55% cellulose and 45% polyester. This composite substrate has the highly absorbent properties of a natural fiber with the cleanliness and strength of a synthetic yarn. Recommended for use in cleanroom critical environments such as research labs, hospitals, and electronics manufacturers.

Cotton

Cotton woven wipers can be used on high-temperature surfaces that would likely melt synthetic or blended wipers. Formed from long staple cotton fiber, these wipers are strong and durable as well as very absorbent in aqueous solutions.

Nylon

Nylon wipes are made from 100% continuous filament knit synthetic nylon, which is a very strong and abrasion resistant. Constructed in a similar manner to polyester, the advantage of nylon is in its heat resistance and strength.

Microfiber

Microfiber is a blend of polyester and knitted nylon. Microfiber increases the surface area, which provides superior wiping efficiency and absorptive performance. The silky texture of microfiber is designed for delicate/scratch sensitive surfaces.

Pre-Saturated

General purpose disposable Pre-sat wipes are packaged in a solvent safe container in which a predetermined amount of solvent has already been added. The perforated wipes are constructed of durable, lint-free, tear resistant polyester and offer the convenience and time savings of not having to pre-mix and measure chemicals for use with wipers. The operator simply opens the container and pulls out a wiper that is ready to be used. They are ideal for a variety of cleaning applications, including electronics, tools, workspaces, and other surfaces that require quick removal of contaminants.

Cleanroom Wipe Attributes

Cleanroom wipes are used to remove contamination in both general facilities management cleaning and critical environment cleaning. They are a frequently used item in the critical environment because they are used to clean all surfaces. Cleanroom wipes offer an extra level of protection for critical applications because they minimize particle generation. Important attributes of Cleanroom wipers include finishing, construction, absorbency, edge treatment, strength and durability, and packaging.



Wiper Performance									
	Polyester	Poly / Cellulose	Cotton	Nylon	Microfiber				
Cleanliness	+++++	+++	++	++++	++++				
Durability	++	+	++++	++++	+++				
Water Absorption	-		++++	-	-				
Solvents Absorption	+++	+++	++++	+++	+++				
Chemical Resistance	+++	+++	+++	+++	+++				
Heat Resistance	-	-	+++	+	+				
Cost	Med	Low	High	High	High				
	- Poor + Go	ood ++ Better	+++ Excellent	++++ Best					

Lab Pro Wipes Selection Chart

	PROPERTIES						APPLICATIONS							
	Cesmoon	Materia,	Finishing	onstruct.	10; 10;	St. Chency	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	ESD S	Les Sensitive	Ster Cleaning	I'Cil Cleaning		Solution	Aviation
LC-ISOWP18 LabClean 70% Isopropyl Alcohol (IPA) wipes	Class 1000- 10000/ISO 6-7	Polyester		Non- woven		•	•		•		•	•	•	
LC-CPWIPE LabClean Poly Cellulose Blend wipes	Class 1000- 10000/ISO 6-7	Poly/ Cellulose	Cold knife cut edge	Non- woven	•	•	•	•	•	•	•	•	•	•
LC-PWIPE LabClean Polyester wipes	Class 100- 1000/ISO 5-6	Polyester	Laser cut	Knit	•		•		•		•	•	•	•
6704 / 6709 Econowipes	Class 1000 M5 / ISO 6	Poly / Cellulose		Non- woven		•	•	•	•		•			•
6713 Econowipes	Controlled Environ- ment	Poly / Cellulose		Non- woven	•	•	•	•	•		•	•	•	•
6209 Light-weight Poly-wipes	Class 100 M4 / ISO 5	Polyester	Laundered	Knit	•				•	•	•	•	•	
6209HC / 62096HC Light-weight Poly-wipes	Class 100 M4 / ISO 5	Polyester	Laundered , Heat cut	Knit	•	•	•		•	•	•	•	•	•
6259 Heavy-weight Poly-wipes	Class 100 M4 / ISO 5	Polyester	Laundered	Knit	•				•		•	•	•	•
6259HC Heavy-weight Poly-wipes	Class 100 M4 / ISO 5	Polyester	Laundered , Heat cut	Knit	•		•		•		•	•	•	
6254BESD / 6259BESD2 Poly-Onyx ESD Wipes	Class 100 M4 / ISO 5	Polyester	Laundered	Knit	•	•	•	•	•		•	•		
7348LE Cleanroom Chamois	Class 100 M4 / ISO 5	Poly / Nylon	Laundered , Laser edged	Knit			•					•		





Edge Treatment Options

The perimeter of the wiper is the primary contaminant source. For example, polyester wipers made from the same fabric can have drastically different levels of contamination based on the way its edges are cut and finished. The predominant wiper edge treatments are: cold knife cut, laser seal, and pressure heat seal.



Laser Seal

A laser cuts and seals edges using heat. This edge treatment is cleaner than the cold knife cut edge treatment because all the fiber ends are melted. The laser sealed edge is thicker than the substrate.



Cold Knife Cut

Cold knife cut edge are cut by a steel blade is used to cut the fabric. This method can leave certain amount of fibers on the wiper and can lead to particulate contamination as the wiper is used.



Pressure Heat Seal

Pressure heat seal is accomplished by using heat and pressure to form the border of the wiper. The edge is then ultrasonically sealed. This is the cleanest edge treatment.