Valutek Pressure-Heat Sealed Polyester Wiper

NanoTek
ISO 3-4 (Class 1-10)

Part Number: VTPNWPHS

Valutek's pressure-heat sealed polyester wiper is made from 100% continuous filament polyester in a double-knit, no-run, interlock pattern with pressure-heat sealed edges.

This wiper is exceptionally clean and offers high absorbency with extremely low levels of particulate and extractable counts. It is laundered and packaged in a cleanroom.

All Valutek wipers undergo testing and are manufactured in ISO compliant facilities under Valutek's inspection and strict process control to uphold Valutek quality standards and meet product specifications.

Features

- 100% continuous filament, double-knit polyester fiber
- Pressure-heat sealed edge for lowest available fiber contamination
- High absorbency and abrasion resistance
- Chemically compatible with IPA, Acetone and other common solvents
- Ultra low levels of particulate and extractable counts

Application

As part of the **Valutek Nanotek product family**, this product is recommended for use in cleanroom **Class 1-10 (ISO 3-4)** critical environments.

It is designed for critical processing applications that require the highest level of contamination control.

Additionally, it is commonly used for cleaning medical device products, applying, removing, cleaning, and disinfecting solutions. It can be steam autoclaved for aseptic environments and is also utilized for tasks like flat panel, optics cleaning, and chips multiprocessing (CMP).

Pre-Saturated Option:

This wiper is available with customized saturated chemistries to meet your specific application requirements.

Size and Packaging

Part Number	Size	Packaging
VTPNWPHS-99	9" x 9" | 23 cm x 23 cm	150 ea/bag, 8 bags/case, 1200 ea/case

- All wipers are packed in double poly bags, vacuum sealed, flat packed in carton boxes and with a carton liner.
- Critical environment compatible.
- All wipers are **lot traceable** with retention samples held in **Quality Control for 36 months** from manufacturing.

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VTPNWPHS Technical Performance

Physical Attribute	Value	Units	Test Method
Basis Weight SPEC	135 ± 5	g/m²	TAPPI T-410
Absorbency SPEC			
Sorptive Efficiency	2	mL/g	IEST-RP.CC004.4, Sec 9.1/Sec 9.2
Sorptive Capacity	310	mL/m²	
Sorptive Rate	<1	second	

Cleanliness Attribute	SPEC*	TPV**	Test Method
Particle Counts			
LPC: ≥0.5 µm (m^2)	< 7 X 10^6 /m²	4.38 X 10^6 /m²	IEST-RP.CC004.4, Sec 7.1.3/Sec 7.2.1
LPC: ≥0.5 µm (cm^2)	< 0.7 X 10^3 /cm²	0.438 X 10^3 /cm²	
Fiber Counts			
Fibers: ≥ 100 µm (m^2)	< 250 /m²	100 /m²	IEST-RP.CC004.4, Sec 7.1.3/Sec 7.2.2
Fibers: ≥ 100 µm (cm^2)	< 0.025 /cm²	0.01 /cm²	
Non Volatile Residue (NVR)			
DI Water Extractant	< 0.02 g/m²	0.01 g/m²	IEST-RP.CC004.4, Sec 8.1.2
IPA Extractant	< 0.10 g/m²	0.04 g/m²	
FTIR			
Silicone Oil, Amide & DOP	Not Detectable	Not Detectable	IEST-RP.CC004.4, Sec 8.2.1
Extractable Counts (Ions)			
Sodium(Na^+)	<0.2 ppm	0.08 ppm	IEST-RP.CC004.4, Sec 8.2.2
Potassium(K^+)	<0.2 ppm	0 ppm	
Calcium(Ca^{2+})	<0.5 ppm	0.03 ppm	
Magnesium(Mg^{2+})	<0.2 ppm	0 ppm	
Ammonium(NH_4^+)	<0.3 ppm	0.02 ppm	
Nitrate(NO_3^-)	<0.3 ppm	0.01 ppm	
Fluoride(F)	<0.2 ppm	0 ppm	
Nitrite(No_2-)	<0.2 ppm	0 ppm	
Bromide(Br^-)	<0.2 ppm	0 ppm	
Phosphate(PO_4^{3-})	<0.3 ppm	0 ppm	
Chloride(Cl^-)	<0.2 ppm	0 ppm	
Sulfate(SO_4^{2-})	<0.2 ppm	0 ppm	

Notes:

***SPEC** values listed reflect upper/lower manufacturing specification limits.
****TPV,** or "Typical Published Values", are based on actual 36 month rolling lot average. These reflect typical performance, not minimum or maximum values.

Certificates of Analysis available upon request for actual lot-to-lot test data. Full **36 month lot trend analysis r**eport available upon request.