



NanoTek
ISO 3-4 (Class 1-10)

Valutek Laser-Sealed Polyester Wiper



Laser Sealed Edge

Valutek's laser-sealed polyester wiper is meticulously crafted from 100% continuous filament polyester in a double-knit, no-run, interlock pattern with a laser-sealed edge.

This wiper is exceptionally clean and boasts high absorbency, featuring critically low levels of particulate and extractable counts.

It undergoes laundering and is carefully packaged in a cleanroom environment. All Valutek wipers are rigorously tested and produced in ISO-compliant facilities, subject to Valutek's inspection and strict process control, ensuring the maintenance of Valutek quality standards and adherence to product specifications.

Features

- 100% continuous filament, double-knit polyester fiber
- Laser sealed (thermally sealed) edge for reduced fiber contamination

Part Number: VTPNWLS

- Moderate absorbency and abrasion resistance
- Chemically compatible with IPA and other common solvent.
- Extremely low levels of particulate and extractable counts
- Available in a variety of sizes to suit most applications

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.

This wiper is also commonly utilized in a wide variety of applications, including cleaning medical device products, cleaning video displays, cleaning instrument panels, and general wiping and cleaning in the semiconductor and microelectronics industry application requirements.

Pre-Saturated Option:

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

Size and Packaging



Part Number	Size	Packaging
VTPNWLS-44	4" x 4" 10 cm x 10 cm	600 ea/bag, 8 bags/case, 4800 ea/case
VTPNWLS-99	9" x 9" 23 cm x 23 cm	150 ea/bag, 8 bags/case, 1200 ea/case
VTPNWLS-1212	12" x 12" 30 cm x 30 cm	75 ea/bag, 5 bags/case, 375 ea/case
VTPNWLS-1818	18" x 18" 46 cm x 46 cm	40 ea/bag, 12 bags/case, 480 ea/case
VTPNWLS-2020	20" x 20" 51 cm x 51 cm	100 ea/bag, 2bags/case, 200 ea/case
VTPNWLS-2626	26" x 26" 66 cm x 66 cm	50 ea/bag, 3 bags/case, 150 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.



Gloves



Wipers



Apparel



Adhesive Mats



Cleaning & Maintenance



Documentation



Glove Liners



ESD



Valutek Laser-Sealed Polyester Wiper

Part Number: VTPNWLS

VTPNWLS Technical Performance

Physical Attribute	Value	Units	Test Method
Basis Weight SPEC	135 ± 10	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 (m²)	< 10 X 10⁶ /m²	7.26 X 10⁶ /m²	IEST-RP.CC004.4, Sec 7.1.3/Sec 7.2.1
LPC: ≥0.5 µm (cm²)	< 1.0 X 10³ /cm²	0.726 X 10³ /cm²	
Fiber Counts			
Fibers: ≥ 100 µm (m²)	< 250 /m²	175 /m²	IEST-RP.CC004.4, Sec 7.1.3/Sec 7.2.2
Fibers: ≥ 100 µm (cm²)	< 0.025 /cm²	0.0175 /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	0.05 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	0.02 ppm	IEST-RP.CC004.4, Sec 8.2.2
Potassium(K⁺)	<0.2 ppm	0.01 ppm	
Calcium(Ca²⁺)	<0.5 ppm	0.06 ppm	
Magnesium(Mg²⁺)	<0.2 ppm	0.02 ppm	
Ammonium(NH₄⁺)	<0.3 ppm	0.02 ppm	
Nitrate(NO₃⁻)	<0.3 ppm	0.02 ppm	
Fluoride(F)	<0.2 ppm	0.01 ppm	
Nitrite(NO₂⁻)	<0.2 ppm	0 ppm	
Bromide(Br⁻)	<0.2 ppm	0 ppm	
Phosphate(PO₄³⁻)	<0.3 ppm	0.03 ppm	
Chloride(Cl⁻)	<0.2 ppm	0.02 ppm	
Sulfate(SO₄²⁻)	<0.2 ppm	0.02 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** report available upon request.



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