# VALUTEK

INNOVATIVE SOLUTIONS FOR CRITICAL ENVIRONMENTS



Version 2018





#### Valutek - Keeping it clean since 1988

Valutek has been servicing the controlled environment needs for thousands of organizations in the life sciences, advanced material and academia since 1988. Our innovative one-source shopping model eliminates the needs to coordinate multiple manufacturers, invoices and contacts - one call does it all. Valutek offers our clients best-in-class products and exceptional customer service. Valutek does not just meet your demands - we consistently exceed them, and has fostered a culture of continuous improvement. Valutek has built our reputation on quality, performance, dedication and knowledge, providing our clients with a trusted business partner you can count on for years to come.

# The convenience and simplicity of one-source shopping

Valutek understands that you have less time and more responsibilities than ever before. Supplying your controlled environments has to be fast and easy. That's why we've built our company around your needs with 24/7 web-based ordering and online tracking/confirmation. When you have questions, your answers are only one click, email, or phone call away with 24/5-telephone support and online product data sheets.

### Knowledgeable, consistent industry leadership

Since 1988, we have been committed to sharing and enhancing knowledge in the contamination control arena. Valutek is a founding sponsor of the Global Society for Contamination Control (http://gsfcc.org), an independent organization focused on advancing contamination control through knowledge exchange and collaboration. In addition, Valutek is an active participant in the leading professional organizations, (IEST, ESDA, INDA, ASTM) and a technical contributor to the leading conferences (SEMI-CON, Interphex, MDM).

Cleanroom Classification Standards						
ISO 14644-1	FED STD 209E					
ISO Class	English	Metric				
1						
2						
3	1	M1.5				
4	10	M2.5				
5	100	M3.5				
6	1,000	M4.5				
7	10,000	M5.5				
8	100,000	M6.5				
9						

#### Proven technology leader focused on quality and performance

Before our products meet your own stringent requirements, they need to meet ours. Valutek is the only manufacturer to provide ongoing independent testing, performed at GSFCC's laboratory SUNY POLYTECHNIC. Our close attention to quality control and commitment to continuous improvement ensures that you will always receive the highest quality products.

# Agile, trusted partner dedicated to value innovation

We are your trusted partner, focused on helping your organization succeed. Along with our commitment to one-source convenience, Valutek's service commitment permeates all aspects of our organization, and is dedicated to only one mission: serving your critical environment needs. Our in-house client service team of knowledgeable, friendly professionals responds to your requests quickly, from order tracking to technical product questions to certificate of compliance requests.

# 70% of cleanroom contamination is operator based

Valutek eliminates contamination, enhances yield and reduces non-compliant product exposure at lower operating cost.

Three product lines engineered for your specific critical environment







\*Valutek makes it easy for you to pick the right products for your controlled environment.

Look for these symbols [ 👘 👘 挿 ]next to each product type.

valutek.com 602.761.2233 USA · Malaysia · China

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# Order Information

#### Interested in the item and want to know more?

Simply click the **PDF** icon next to the item title to access the product data sheet for detailed information regarding the product specifications and performance.

#### How to purchase?

If you are interested in one specific product, just click on the hyperlinked part number and it will lead you directly to the product purchase page on our website, from there you can instantly place your order and check out online.

#### Could not access the item through hyperlink?

Some items are not hyperlinked due to they are Valutek's special order products. If you are interested in purchasing these items, please click the below contact information to speak with one of our technically competent account executives.

#### Questions and special needs?

For bulk purchase and contracted agreements, please contact Valutek directly for negotiated price and other related benefits. If you have any questions regarding our products, please do not hesitate to contact us. Valutek is always here to assit and ensure that your critical environment has the right consumables.

To place an order please call our Sales & Customer Service hotline at 602.761.2233 Fax orders: 602.252.1972

In addition, you can email questions to us at <u>orderdesk@valutek.com</u> As always, we can be contacted at <u>1.800.763.1250</u> from 6:30 am - 5:00 pm Mountain Standard time



# Wipers

# <sup>C</sup>Eliminate Contamination Safely



### Wiper Selection Guide

#### **Cleanroom Wipers**

Wipers are used to remove contamination in both general facility/ environment cleaning and critical product/process cleaning. They are a high-visibility item in the controlled environment because they are used to clean all surfaces. A few examples include: wiping operators' gloves; wiping cart wheels as they enter the fab; wiping the inner protective bags that contain production supplies; cleaning work station surfaces; cleaning production equipment and final wipe down of finished product.

*Important attributes of wipers include substrate, edge treatment, size, durability, absorbency and packaging.* 

#### Wiper Substrates

Engineered Fabric This general-purpose engineered fabric is a blend of cellulose and polyester fibers that combine the highly absorbent properties of a natural fiber with the cleanliness and strength of a synthetic.

#### Cotton

Woven cotton 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.

#### Polyester

One-ply and two-ply 100% continuous filament knit synthetic polyesters low in particulates and extractable, high in durability and strength, and are recommended for removal of dry particulates and contaminants. The two-ply polyester is more absorbent than oneply polyester because of its quilted texture's ability to retain liquids. Perfectly suited for ultra-clean environments.

#### Nylon

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

#### Microfiber

This fabric 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-Wetted

Pre-wetted wipers offer the convenience and time savings of not having to pre-mix and measure chemicals for use with wipers. Packaged in a solvent safe container in which a predetermined amount of solvent has already been added. The operator simply opens the container and pulls out a wiper that is ready to be used.

#### Wiper Substrate Performance

	Poly/ Cellulose	Cotton	Nylon	Microfiber	Polyester				
Cleanliness	+++	++	++++	++++	+++++				
Durability	+	++++	++++	+++	++				
Water Absorption	+++	++++	-	-	-				
Solvents Absorption	+++	++++	+++	+++	+++				
Chemical Resistance	+++	+++	+++	+++	+++				
Heat Resistance	-	+++	+	+	-				
Cost	Low	High	High	High	Med				
* - Poor + Good ++ B	* - Poor + Good ++ Better +++ Excellent ++++ Best								

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, ultrasonic seal and pressure heat seal.



#### Cold Knife Cut

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.

#### 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.



#### Ultrasonic Seal

Ultrasonic seal is superior to laser seal because it delivers a softer edge with lower carbon levels. An ultrasonic sealed edge is thinner than the substrate.

#### **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.

# Wiper Substrate Selection Guide

#### Three Wiper Substrate Criteria:

#### Absorbency

The rate and amount of liquid that a wiper can hold, measured in milliliters (ml) per square meter. The measured rate and total absorption will determine a wiper's cleaning efficacy.

#### Extractables

The concentration of elements extracted from the wiper in an immersion test, measured in Parts Per Million (PPM) or Parts Per Billion (PPB). Certain elements (i.e. Silicone) can have more negative impact than other elements.

#### Particles

The number of particulates that are released by the material during testing. Polyester usually has the lowest particle rate, followed by nylon, poly-cellulose blend and cotton, which have the highest rate.

Wiper Substrate Selection Chart								
	Engineered	Fabric	Knitted Fabric					
	Poly/Cellulose	Rayon	Cotton	Nylon	Poyester	2-ply Poyester	Microfiber	
Absorbency	+++	++	+++	+	+	+++	+++	
Extractables	++	++	+	++	+++	+++	++	
Particles	+	++	+	+++	+++	+++	++	
		+ Good	++ Bett	er ++	+ Best			

(Engineered Fabric: It is not made by weaving or knitting and does not require converting the fibers to yarn. The fabric is chemically pure and hydro entangled.

Knitted Fabric: This is a material with interlaced loops. It is constituted of a single rolled up thread by curling on itself.)



Valutek's wipers are packed in double poly bags, vacuum sealed, flat packed in carton boxes and with a carton liner.

All wipers are controlled environment compatible, lot traceable with retention samples held in Quality Control for 36 months from date of manufacturing.

Vacuum seal benefit: better storage, no wiper fiber release, no ESD issue.







VALUTEK	
MacroTek	
VTSNTR-99	
Spuniace Non-Woven Wiper Size: 9" X 9"	
300Ex/Bag 12Begs/Case	
Lot PORDERTIGES-20050219	
valutek.com etc.ps.com	

	V	41	Lι	J.	ТΙ	ΕK	(	
			Mic	-01	ēk			
		v	TP	w	-99			
			Polyes Size	9°X	per 9°			
		Randa	No Tile	ght.L	aunder I	ed		
		7 7	5 wipe t bag	s per	beg pack			
		8 Lot	Peak	s per	case			
-			valutai	Loom			-	
			*** 2	10540				









#### Spunlace Non-Woven Wiper PDF

- 55% cellulose and 45% polyester blend
- Basis weight: 68 g/m<sup>2</sup>
- Cold knife cut edge
- Contains no chemical binders
- High absorbency and low abrasion resistance
- Chemically compatible with common cleaning and disinfecting solutions

Size

4" x 4"

9″ x 9″

12" x 12"

18" x 18"

- Low levels of extractable and moderate particle counts
- Available in a variety of sizes to suit most applications

The spunlace non-woven wiper is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment. It is a highly absorbent wiper for general purpose and environmental / facility cleaning.

10 cm x 10 cm

23 cm x 23 cm

30 cm x 30 cm

46 cm x 46 cm

MacroTek
ISO 7+ (Class 10.000+)

Total/Case

14400 ea/case

3600 ea/case

1500 ea/case

750 ea/case

ESD
Static
Dissipative

- 400	1.1	1.1	

#### Rayon Wiper (PDF)

Part Number

VTSNTR-1212

VTSNTR-1818

VTSNTR-44 VTSNTR-99

- 100% rayon
- Cold knife cut edge
- Excellent absorbency
- High abrasive resistance
- Compatible with IPA and other common solvents

The rayon wiper is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment. It is a preferred choice for a wide variety of applications, such as laboratories, aerospace, defense electronics, biotech, semiconductor, circuit board and pharmaceutical device manufacturing facilities.

#### MacroTek ISO 7+ (Class 10.000+)

Part Number	S	ize	Packaging	Total/Case	
VTRRA-2030	20" x 30"	50.8 cm x 76.2 cm	1000 ea/bag, 1 bag/case	1000 ea/case	Scratch

Packaging

1200 ea/bag, 12 bags/case

300 ea/bag, 12 bags/case

150 ea/bag, 10 bags/case

75 ea/bag, 10 bags/case

#### Twill Patterned Cotton Wiper PDF

- 100% cotton
- Cold knife cut edge
- Excellent absorbency
- High heat resistance enables high temperature tolerance
- Compatible with IPA and other common solvents

The cotton wiper is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment. It is ideal for high heat settings such as high purity welding. It is also commonly used for cleaning, polishing and burnishing magnetic media disk surfaces, and the cleanup of aqueous and organic solvent spills.

MacroTek ISO 7+ (Class 10.000+)

Part Number	Si	ze	Packaging	Total/Case
<u>VTTPC-99</u>	9″ x 9″	23 cm x 23 cm	150 ea/bag, 10 bags/case	1500 ea/case
VTTPC-1212	12" x 12"	30 cm x 30 cm	75 ea/bag, 10 bags/case	750 ea/case

Cotton

Non Woven

#### Light-Weight Polyester Wiper PDF

- 100% continuous filament, double-knit polyester fiber
- Cold knife cut edge
- Basis weight: 128 g/m<sup>2</sup>
- Moderate absorbency and abrasion resistance
- Chemical compatible with IPA and other common solvents
- Low levels of particulate and extractable counts
- Light weight material reduces both actual cost and the landfill waste impact
- Available in a variety of sizes to suit most applications

This wiper is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is commonly used for a wide variety of applications such as spill control, general wiping, breakdown cleaning in fab and suite construction, cleaning medical device products, cleaning and burnishing magnetic media surfaces, and wiping sensitive surfaces.



Part Number	Size		Packaging	Total/Case
VTPNWLW-99	9″ x 9″	23 cm x 23 cm	150 ea/bag, 8 bags/case	1200 ea/case
VTPNWLW-1212	12" x 12"	30 cm x 30 cm	100 ea/bag, 3 bags/case	300 ea/case

#### Standard Weight Polyester Wiper PDF

- 100% continuous filament, double-knit polyester fiber
- Basis weight: 135 g/m<sup>2</sup>
- Cold knife cut edges
- Chemically compatible with IPA and other common solvents
- Moderate absorbency and abrasion resistance
- Low levels of particulate and extractable counts
- Available in a variety of sizes to suit most applications

This wiper is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is commonly used for breakdown cleaning in fab and suite construction, equipment wrapping, wiping down, stencil and other print roll cleaning, medical device product cleaning, and autoclavable/sterile product cleaning for aseptic applications.



Part Number	Si	ze	Packaging	Total/Case
VTPNW-44	4" x 4"	10 cm x 10 cm	600 ea/bag, 8 bags/case	4800 ea/case
VTPNW-66	6" x 6"	15 cm x 15 cm	150 ea/bag, 8 bags/case	1200 ea/case
VTPNW-99	9″ x 9″	23 cm x 23 cm	150 ea/bag, 8 bags/case	1200 ea/case
<u>VTPNW-1212</u>	12" x 12"	30 cm x 30 cm	75 ea/bag, 5 bags/case	375 ea/case
<u>VTPNW-2020</u>	20" x 20"	51 cm x 51 cm	100 ea/bag, 3 bags/case	300 ea/case
VTPNW-2144	21" x 24"	53cm x 112 cm	75 ea/bag, 2 bags/case	150 ea/case

#### Laser-Sealed Polyester Wiper PDF

- 100% continuous filament, double-knit polyester fiber
- Basis weight: 135 g/m<sup>2</sup>
- Laser sealed (thermally sealed) edge for reduced fiber contamination
- Moderate absorbency and abrasion resistance
- Chemically compatible with IPA and other common solvents
- Extremely low levels of particulate and extractable counts
- Available in a variety of sizes to suit most applications

This wiper is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is commonly used for a wide variety of applications such as cleaning medical device products; cleaning video displays and instrument panels; and general wiping and cleaning in semiconductor and microelectronics.

Part Number	Si	ze	Packaging	Total/Case
VTPNWLS-44	4" x 4"	10 cm x 10 cm	600 ea/bag, 8 bags/case	4800 ea/case
VTPNWLS-66	6" x 6"	15 cm x 15 cm	600 ea/bag, 5 bags/case	3000 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, 10 bags/case	750 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, 2 bags/case	200 ea/case
VTPNWLS-2626	26" x 26"	66 cm x 66 cm	50 ea/bag, 3 bags/case	150 ea/case

#### Pressure-Heat Sealed Polyester Wiper PDF

- 100% continuous-filament double-knit polyester fiber
- Basis Weight: 135 g/m<sup>2</sup>
- Pressure-heat sealed edge for lowest available fiber contamination
- High absorbency and abrasion resistance
- Excellent chemical compatibility with IPA, Acetone and other common solvents
- Ultra low levels of particulate and extractable counts

This wiper is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is designed for critical processing applications where the highest level of contamination control is required. It is also commonly used for cleaning medical device products; applying, removing, cleaning and disinfecting solutions; is steam autoclavable for aseptic environments; and used for flat panel, optics cleaning, and chips multi-processing (CMP).

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



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#### Ultrasonic Sealed Polyester Wiper PDF

- 100% continuous-filament double-knit polyester fiber
- Basis weight: 135 g/m<sup>2</sup>
- Ultrasonic sealed edge for reduced fiber contamination
- Moderate absorbency and abrasion resistance
- Excellent chemical compatibility with IPA and other common solvents
- Extremely low levels of particulate and extractable counts
- Available in a variety of sizes to suit most applications

This wiper is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is designed for critical processing applications where the highest level of contamination control is required. It is also commonly used for cleaning medical device products; applying, removing, cleaning and disinfecting solutions; is steam autoclavable for aseptic environments; and used for flat panel, optics cleaning, and chips multi-processing (CMP).



Part Number	Size		Packaging	Total/Case
VTPNWUS-44	4" x 4"	10 cm x 10 cm	600 ea/bag, 8 bags/case	4800 ea/case
VTPNWUS-99	9″ x 9″	23 cm x 23 cm	150 ea/bag, 8 bags/case	1200 ea/case
VTPNWUS-1212	12" x 12"	30 cm x 30 cm	75 ea/bag, 10 bags/case	750 ea/case

#### 2-Ply Ultrasonic Sealed Polyester Wiper PDF

- 100% continuous filament polyester knit
- Basis weight: 260 g/m<sup>2</sup>
- 2-ply construction with unique pattern and knitting structure provides the highest cleanliness
- Ultrasonic sealed edge for with reduced fiber contamination
- Highest possible absorbency in a polyester substrate material
- Chemically compatible with IPA and other solvents
- Critically low levels of particulate and extractable counts
- Available in a variety of sizes to suit most applications

This wiper is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is designed for critical processing applications where high absorbency and low particles are required. It is commonly used for spill control, large volume cleaning, sterilizing, disinfecting, cleaning surfaces, and is product equipment and steam autoclavable for aseptic environments.



Part Number	Si	ze	Packaging	Total/Case
VT2PNWUS-46	4" x 6"	10 cm x 15 cm	600 ea/bag, 6 bags/case	3600 ea/case
VT2PNWUS-99	9″ x 9″	23 cm x 23 cm	100 ea/bag, 8 bags/case	800 ea/case
VT2PNWUS-1212	12" x 12"	30 cm x 30 cm	100 ea/bag, 8 bags/case	800 ea/case
VT2PNWUS-1818	18" x 18"	46 cm x 46 cm	20 ea/bag, 10 bags/case	200 ea/case



- 100% continuous filament, double-knit polyester fiber
- Basis weight: 155 g/m<sup>2</sup>
- Cold knife cut edge
- Chemically compatible with IPA and other common solvents
- Excellent absorbency and abrasion resistance
- Low levels of particulate and extractable counts
- Carbon fiber woven to provide ESD compliance

This wiper is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is commonly used in a wide variety of applications, such as optics and LCD screen cleaning, electronic manufacturing, optical cleaning and pharmaceutical manufacturing.

Part Number	Si	ze	Packaging	Total/Case	Static
VTPNWESD-99	9″ x 9″	23 cm x 23 cm	150 ea/bag, 8 bags/case	1200 ea/case	Dissipati

#### Nylon Knit Wiper [PDF]

- 100% continuous filament, double-knit nylon fiber
- Cold knife cut edge
- Excellent tensile strength, elasticity and durability
- Low levels of particulate and extractable counts
- Chemically compatible with common cleaning and disinfecting solutions
- Available in a variety of sizes to suit most applications

This wiper is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. The tough and abrasive surface of nylon makes this wiper a great selection for cleaning stubborn contaminants.

Part Number	Si	ze	Packaging	Total/Case	
<u>VTNNW-99</u>	9″ x 9″	23 cm x 23 cm	150 ea/bag, 8 bags/case	1200 ea/case	Scra
VTNNW-1212	12" x 12"	30 cm x 30 cm	100 ea/bag, 10 bags/case	1000 ea/case	

#### Pressure-Heat Sealed Microfiber Wiper PDF

- 70% polyester and 30% nylon knitted fiber
- Basis weight: 200 g/m<sup>2</sup>
- Pressure heat sealed edges for lowest available fiber contamination
- Microfiber increases the surface area which provides superior wiping efficiency and sorptive performance
- Chemically compatible with IPA and other common solvents
- Low levels of particulate and extractable counts
- Soft and silky hand feel for sensitive surfaces

This wiper is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is designed for scratch sensitive surfaces, such as occur in display and semiconductor industries. It is also commonly used for cleaning precise optical machinery and tools, cleaning a delicate process in critical cleanrooms, and for applying and removing cleaning and disinfecting solutions.

Will Not

MicroTek

ISO 5-6 (Class 100- 1.000)

MicroTek

ISO 5-6 (Class 100- 1.000)



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#### Ultrasonic-Sealed Low Texture Microfiber Wiper PDF

- 75% continuous filament polyester and 25% nylon knitted fiber
- Ultrasonic sealed edge for reduced fiber contamination
- Low textured soft material suitable for sensitive wiping surfaces
- Excellent absorbency and high abrasion resistance
- Chemical compatibility with IPA, Acetone and other common solvents
- Low levels of particulates and extractable counts

This wiper is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is also ideal for wiping objects in a wide variety of applications, such as watch, optic and screen display, touching screen, LCD Industrial wiping and high precision device and equipment maintenance.



Part Number	S	ize	Packaging	Total/Case	
VTMFWLTUS-99	9″ x 9″	23 cm x 23 cm	100 ea/bag, 10 bags/case	1000 ea/case	



tions.

Micro Tek touch panels, medical device lenses, PCB's, SMT, and hard disk applica-ISO 5-6 (Class 100- 1.000)

Part Number	Size		Packaging	Total/Case
VTPNUWUS-99	9″ x 9″	23 cm x 23 cm	100 ea/bag, 10 bags/case	1000 ea/case



Pre-Wetted

Pre-Wetted

REFILL

#### Pre-Wetted Spunlace Non-Woven Wiper Pail [PDF]

- 55% cellulose and 45% polyester blend with cold knife cut edge
- Pre-wetted with consistent IPA/DI Water concentrations and saturation levels
- Packaged in a re-usable pail container to prevent solvent evaporation
- Contains no chemical binders
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is designed for use in wet cleaning of critical surfaces and products. Various IPA blend levels are ideal for removing different cleaning and disinfecting residues in regulated environments.

Part Number	Size		IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case
VTSNTRI06-99	9″ x 9″	23 cm x 23 cm	6/94	75 ea/pail, 2pails/case	150 ea/case
VTSNTRI10-99	9″ x 9″	23 cm x 23 cm	10/90	75 ea/pail, 2pails/case	150 ea/case
VTSNTRI70-99	9″ x 9″	23 cm x 23 cm	70/30	75 ea/pail, 2pails/case	150 ea/case
VTSNTRI90-99	9″ x 9″	23 cm x 23 cm	90/10	75 ea/pail, 2pails/case	150 ea/case
VTSNTRI99-99	9″ x 9″	23 cm x 23 cm	99/1	75 ea/pail, 2pails/case	150 ea/case

#### Pre-Wetted Spunlace Non-Woven Wiper Refill Pack [PDF]

- 55% cellulose and 45% polyester blend with cold knife cut edge
- Pre-wetted with consistent IPA/DI Water concentrations and saturation levels
- Packaged in refill bags for pre-wetted spunlace non-woven wiper pail
- Contains no chemical binders
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is designed for use in wet cleaning of critical surfaces and products. Various IPA blend levels are ideal for removing different cleaning and disinfecting residues in regulated environments.

Part Number	S	lize	IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case
VTSNTRI06R-99	9″ x 9″	23 cm x 23 cm	6/94	75 ea/bag, 18 bags/case	1350 ea/case
VTSNTRI10R-99	9″ x 9″	23 cm x 23 cm	10/90	75 ea/bag, 18 bags/case	1350 ea/case
VTSNTRI70R-99	9″ x 9″	23 cm x 23 cm	70/30	75 ea/bag, 18 bags/case	1350 ea/case
VTSNTRI90R-99	9″ x 9″	23 cm x 23 cm	90/10	75 ea/bag, 18 bags/case	1350 ea/case
VTSNTRI99R-99	9″ x 9″	23 cm x 23 cm	99/1	75 ea/bag, 18 bags/case	1350 ea/case









#### Pre-Wetted Polyester Wiper Pail PDF

- 100% continuous filament, double-knit polyester fiber with cold knife cut edge
- Pre-wetted with consistent IPA/DI Water concentrations and saturation levels
- Packaged in a re-usable pail container to prevent solvent evaporation
- Very low levels of particles, fibers, ions and extractables
- High abrasion resistance
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is designed for use in wet cleaning of critical surfaces where control of flammable solvents and flammable solvent concentrations is required. Various IPA blend levels are ideal for removing different cleaning and disinfecting residues in regulated environments.



Part Number	9	Size	IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case
VTPNWSI05-99	9″ x 9″	23 cm x 23 cm	5/95	150 ea/pail, 2pails/case	300 ea/case
VTPNWSI10-99	9″ x 9″	23 cm x 23 cm	10/90	150 ea/pail, 2pails/case	300 ea/case
VTPNWSI50-99	9″ x 9″	23 cm x 23 cm	50/50	150 ea/pail, 2pails/case	300 ea/case
VTPNWSI70-99	9″ x 9″	23 cm x 23 cm	70/30	150 ea/pail, 2pails/case	300 ea/case
VTPNWSI90-99	9″ x 9″	23 cm x 23 cm	90/10	150 ea/pail, 2pails/case	300 ea/case
VTPNWSI99-99	9″ x 9″	23 cm x 23 cm	99/1	150 ea/pail, 2pails/case	300 ea/case
VTPNWSI100-99	9″ x 9″	23 cm x 23 cm	100/0	150 ea/pail, 2pails/case	300 ea/case



#### Pre-Wetted Polyester Wiper Refill Pack PDF

- 100% continuous filament, double-knit polyester fiber with cold knife cut edge
- Pre-wetted with consistent IPA/DI Water concentrations and saturation levels
- Packaged in refill bags for pre-wetted polyester wiper pail
- Very low levels of particles, fibers, ions and extractables
- High abrasion resistance
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is designed for use in wet cleaning of critical surfaces where control of flammable solvents and flammable solvent concentrations is required. Various IPA blend levels are ideal for removing different cleaning and disinfecting residues in regulated environments.



Part Number	S	Size	IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case
VTPNWSI05R-99	9″ x 9″	23 cm x 23 cm	5/95	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWSI10R-99	9″ x 9″	23 cm x 23 cm	10/90	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWSI50R-99	9″ x 9″	23 cm x 23 cm	50/50	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWSI70R-99	9″ x 9″	23 cm x 23 cm	70/30	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWSI90R-99	9″ x 9″	23 cm x 23 cm	90/10	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWSI99R-99	9″ x 9″	23 cm x 23 cm	99/1	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWSI100R-99	9″ x 9″	23 cm x 23 cm	100/0	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case

Pre-Wetted

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Pre-Wetted

Pre-Wetted

#### Pre-Wetted Laser-Sealed Polyester Wiper Pail [PDF]

- 100% continuous filament, double-knit polyester fiber
- Laser sealed (thermally sealed) edge for reduced fiber contamination
- Pre-wetted with consistent IPA/DI Water concentrations and saturation levels
- Packaged in a re-usable pail container to prevent solvent evaporation
- Very low levels of particles, fibers, ions and extractables
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is designed for use in wet cleaning of critical surfaces where control of flammable solvents and flammable solvent concentrations is required. Various IPA blend levels are ideal for removing different cleaning and disinfecting residues in regulated environments.

Part Number	9	Size	IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case
VTPNWLSI06-99	9″ x 9″	23 cm x 23 cm	6/94	150 ea/pail, 2pails/case	300 ea/case
VTPNWLSI10-99	9″ x 9″	23 cm x 23 cm	10/90	150 ea/pail, 2pails/case	300 ea/case
VTPNWLSI50-99	9″ x 9″	23 cm x 23 cm	50/50	150 ea/pail, 2pails/case	300 ea/case
<u>VTPNWLSI70-99</u>	9″ x 9″	23 cm x 23 cm	70/30	150 ea/pail, 2pails/case	300 ea/case
VTPNWLSI70-1212	12" x 12"	30 cm x 30 cm	70/30	120 ea/pail, 2pails/case	240 ea/case
VTPNWLSI90-99	9″ x 9″	23 cm x 23 cm	90/10	150 ea/pail, 2pails/case	300 ea/case
VTPNWLSI99-99	9″ x 9″	23 cm x 23 cm	99/1	150 ea/pail, 2pails/case	300 ea/case
VTPNWLSI100-99	9″ x 9″	23 cm x 23 cm	100/0	150 ea/pail, 2pails/case	300 ea/case

#### Pre-Wetted Laser-Sealed Polyester Wiper Refill Pack [PDF]

- 100% continuous filament, double-knit polyester fiber
- Laser sealed (thermally sealed) edge for reduced fiber contamination
- Pre-wetted with consistent IPA/DI Water concentrations and saturation levels
- Packaged in refill bags for pre-wetted laser-sealed polyester wiper pail
- Very low levels of particles, fibers, ions and extractables
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is designed for use in wet cleaning of critical surfaces where control of flammable solvents and flammable solvent concentrations is required. Various IPA blend levels are ideal for removing different cleaning and disinfecting residues in regulated environments.

Part Number	Size		IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case
VTPNWLSI06R-99	9″ x 9″	23 cm x 23 cm	6/94	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWLSI10R-99	9″ x 9″	23 cm x 23 cm	10/90	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWLSI50R-99	9″ x 9″	23 cm x 23 cm	50/50	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWLSI70R-99	9″ x 9″	23 cm x 23 cm	70/30	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWLSI90R-99	9″ x 9″	23 cm x 23 cm	90/10	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWLSI99R-99	9″ x 9″	23 cm x 23 cm	99/1	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWLSI100R-99	9″ x 9″	23 cm x 23 cm	100/0	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case





Nano Tek ISO 3-4 (Class I-10)







#### Pre-Wetted Pressure-Heat Sealed Polyester Wiper Pail [PDF]

- 100% continuous-filament double-knit polyester fiber
- Pressure-heat sealed edge for lowest available fiber contamination
- Pre-wetted with consistent IPA/DI Water concentrations and saturation levels
- Packaged in a re-usable pail container to prevent solvent evaporation
- Very low levels of particles, fibers, ions and extractables
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is designed for use in wet cleaning of critical surfaces where control of flammable solvents and flammable solvent concentrations is required. Various IPA blend levels are ideal for removing different cleaning and disinfecting residues in regulated environments.





Part Number	5	Size	IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case
VTPNWPHSI10-99	9″ x 9″	23 cm x 23 cm	10/90	150 ea/pail, 2pails/case	300 ea/case
VTPNWPHSI50-99	9″ x 9″	23 cm x 23 cm	50/50	150 ea/pail, 2pails/case	300 ea/case
VTPNWPHSI70-99	9″ x 9″	23 cm x 23 cm	70/30	150 ea/pail, 2pails/case	300 ea/case
VTPNWPHSI90-99	9″ x 9″	23 cm x 23 cm	90/10	150 ea/pail, 2pails/case	300 ea/case
VTPNWPHSI100-99	9″ x 9″	23 cm x 23 cm	100/0	150 ea/pail, 2pails/case	300 ea/case





#### Pre-Wetted Pressure-Heat Sealed Polyester Wiper Refill Pack PDF

- 100% continuous-filament double-knit polyester fiber
- Pressure-heat sealed edge for lowest available fiber contamination
- Pre-wetted with consistent IPA/DI Water concentrations and saturation levels
- Packaged in refill bags for pre-wetted pressure-heat sealed polyester wiper pail
- Very low levels of particles, fibers, ions and extractables
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is designed for use in wet cleaning of critical surfaces where control of flammable solvents and flammable solvent concentrations is required. Various IPA blend levels are ideal for removing different cleaning and disinfecting residues in regulated environments.



Part Number	Size		IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case
VTPNWPHSI10R-99	9″ x 9″	23 cm x 23 cm	10/90	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWPHSI50R-99	9″ x 9″	23 cm x 23 cm	50/50	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWPHSI70R-99	9″ x 9″	23 cm x 23 cm	70/30	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWPHSI90R-99	9″ x 9″	23 cm x 23 cm	90/10	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case
VTPNWPHSI100R-99	9″ x 9″	23 cm x 23 cm	100/0	75 ea/bag, 2 bags/pack, 4 packs/case	600 ea/case



#### Pre-Wetted Laser-Sealed Polyester Wiper in ESD Pouch [PDF]

- 100% continuous filament, double-knit polyester fiber
- Laser sealed (thermally sealed) edge for reduced fiber contamination
- Pre-wetted with a blend of 70% IPA and 30% DI water.
- Packaged in a resealable static shield bag for ESD sensitive environments
- Very low levels of particles, fibers, ions and extractables
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is designed for use in wet cleaning of critical surfaces where control of flammable solvents and flammable solvent concentrations is required. It is also ideal for critical wiping applications where static control is paramount.

Part Number	S	Size	IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case	Static
VTPNWLSI70-99F	9″ x 9″	23 cm x 23 cm	70/30	30 ea/pouch, 20 pouches/case	600 ea/case	Dissipati

#### Pre-Wetted Pressure Heat-Sealed Polyester Wiper in Clear Pouch PDF

- 100% continuous filament, double-knit polyester fiber
- Pressure heat-sealed edge for reduced fiber contamination
- Pre-wetted with specified IPA/DI Water concentrations to a 38% saturation level
- Vacuum packed in a clear laminated, high barrier resealable zipper pouch for excellent product visibility, cleanliness and extended product shelf life.
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is designed for use in wet cleaning of critical surfaces where control of flammable solvents and flammable solvent concentrations is required. It is also ideal for critical wiping applications where static control is paramount.

Part Number	S	Size	IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case	
VTPNWPHSI70P-99	9″ x 9″	23 cm x 23 cm	70/30	30 ea/pouch, 20 pouches/case	600 ea/case	

#### Pre-Wetted Ultrasonic Sealed Polyester Wiper in Clear Pouch PDF

- 100% continuous filament, double-knit polyester fiber
- Ultrasonic sealed edge for reduced fiber contamination
- Pre-wetted with specified IPA/DI Water concentrations to a 38% saturation level
- Vacuum packed in a clear laminated, high barrier resealable zipper pouch for excellent product visibility, cleanliness and extended product shelf life.
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is designed for use in wet cleaning of critical surfaces where control of flammable solvents and flammable solvent concentrations is required. It is also ideal for critical wiping applications where static control is paramount.

Part Number	Size		IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case	
VTPNWUSI70P-99	9″ x 9″	23 cm x 23 cm	70/30	30 ea/pouch, 20 pouches/case	600 ea/case	

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Pre-Wetted





NanoTek

ISO 3-4 (Class I-10)











# Protect the most vital tools



### **Glove Selection Guide**

#### **Cleanroom Gloves**

Industrial and medical boxed gloves serve one purpose: to protect the operators. Cleanroom bagged gloves are designed to protect both the operators and the products. The primary purpose of wearing gloves in a controlled environment is to minimize submicron particle contamination of the product or process from the operator's hands. Therefore, choosing the most appropriate glove is one of the most important cleanroom consumable selections.

Gloves serve a critical function inside a cleanroom because they make direct contact with both the product and the process.

#### **Glove Substrates**

#### Natural Rubber Latex (Latex)

Historically the most common material for gloves due to its durability, comfort, and dexterity. Latex is ideal when high dexterity and tactile sensitivity is necessary. It provides excellent protection against contamination and chemicals such as acids, alcohols and ketones. In some people, latex proteins may cause an allergic reaction for which nitrile gloves provide a good alternative.

Known for its inherent cleanliness (low in both particles and ionic extractable), ESD properties, and low cost. These attributes make vinyl gloves ideal for use in medical device manufacturing, microelectronics, and other similar dry controlled environments. A PVC glove fit looser on an operator's hand than latex or nitrile, which can reduce dexterity.

#### Vinyl Nitrile Latex +++ **Static Dissipative** +++ None **Protein Allergies** None

++

+++

++

+++

++

+++

+++

Chemical Resistance

Strength/Durability

**Tactile Sensitivity** 

Modulus

Acrylonitrile Butadiene Rubber (Nitrile) This material offers good dexterity and superior resistance to many types of chemicals. Compared to latex, nitrile is lower in particles, ionic extractable and non-volatile residues (NVR). Nitrile also has "memory" properties that adapt it to the hand for a more custom fit that reduces fatigue. It is three times more puncture resistant than latex, and it also provides protection against cutting and scraping. Static-dissipative properties make nitrile ideal for all static sensitive environments.

love	Subst	rate Se	electic	on Ch	ari

### Glove Selection Guide

#### Five Glove Selection Criteria:

#### Particle Count

Numbers of particulate matter (contaminants) that comes off the gloves, typically measured in a dry test. Nitrile has the lowest amount of particles, followed by PVC, and latex has the highest particle count.

#### Extractable Count

The amount of elements extracted from the gloves in an immersion test, generally measured in Parts Per Billion (PPB) or Grams per Square Meter ( $g/m^2$ ). 18 mega ohm DI H<sub>2</sub>O washed nitrile has the lowest ionic counts, followed by PVC and latex.

#### Electrostatic Discharge (ESD) Properties

The capacity of a glove to dissipate, or conduct a static charge to a ground. Both PVC and nitrile exhibit excellent ESD qualities. Latex is insulative.

#### Dexterity

Latex gloves fit tight on the hand, but have no "memory" to conform to a specific hand shape. Nitrile's memory (modulus) properties provide more comfort, but are lower in elasticity than latex. PVC has much lower dexterity and is recommended when tactile requirements are low.

#### Chemical Compatibility

Latex is a good choice for protection against acids. Nitrile has better resistance than latex to a broad range of chemicals and performs well with solvents and acids. PVC has poor acid and solvent based resistance and is best suited for a dry environment. Note: Thin-walled gloves are only intended for splash protection.

# **Glove Sizing Chart**

#### How to select the right glove size

To find your glove size, measure (in inches) around your palm indicated by picture A. Valutek indicates glove sizes by letter (XS, SM, MD, LG, XL, XXL), use the table below to find the equivalent translation.

Choose the letter size from the chart that is the closest to the number you measured. For example: if as a woman, your hand measures  $7\frac{3}{4}$ ", then choose a size "L".

Men's Glove Sizing Guide			Wome	n's Glove Siz	ing Guide
Size	Inch	Centimeter	Size	Inch	Centimeter
XS	7"	18 cm	XS	5½"-6"	14-15 cm
SM	7½"-8"	19-20 cm	SM	6"-6½"	15-17 cm
MD	8½"-9"	22-23 cm	MD	7"-7½"	17.5-19 cm
LG	9½"-10"	24-25 cm	LG	7½"-8"	19-20 cm
XL	10½"-11″	26.5-28 cm	XL	81⁄2"-9"	21.5-23 cm
2X	11½"-12"	29-30.5 cm	2X	-	-

#### Choose the cuff length that you need

To determine the correct glove length you need, measure from the tip of the middle finger to where the cuff edge should be on forearm as shown in Picture B, then select the proper cuff and length.

Valutek offers three cuff lengths: 9", 9.5" and 12". The longer the length, the more added protection to your products.



Picture A

# Glove Chemical Compatibility Chart

Chemical	Nitrile	Latex	Vinyl
Acetaldehyde	•••	•••	•
Acetone		•••	••
Acetic Acid	•••	•••	•••
Acetylene Gas	••••		
Aluminium Sulfate	••••		
Ammonium Hydroxide, Dilute	••••	•••	••••
Ammonium Nitrate	••••		
Ammonium Sulfate	••••	••••	••••
Amyl Alcohol	••••		••••
Anline	•••	•	••
Anline Oil	•••		
Animal Fats	••••		
Animal Oils	••••		
Antifreeze		••••	••••
Barium Sulfite	••••		
Beet Sugar Liquors	••••		
Benzyl Alcohol	•••		
Borax	••••		
Boric Acid	•••	••••	••••
BrakeFluid		•••	•••
Butyl Alcohol	•••	•••	••••
Butyle Cellusolve			•••
Calcium Bisulfite	••••		
Calcium Chloride	•••	••••	••••
Calcium Disulfide			•••
Calcium Hydroxide	•••	••••	••••
Calcium Hypochlorite	•••		
Carbolic Acid	••••		
Carbon Dioxide	••••	•••	••••
Castor Oil	••••	••••	••••
Caustic Potash	••••		
Caustic Soda	••••		
Chlorine Solution	••••		
Chromic Acid 30%	•••		••
Citric Acid	••••	••••	••••
Copper Chloride	••••		

Excellent	
Good	
Fair	
Poor	•
Not Recommended	•

Chemical	Nitrile	Latex	Vinyl
Copper Sulfate			
Cotton Seed Oil	••		
Cresol	•	•	
Cupric Nitrate	••••		
Cyclohexane		•	••••
Cyclohexanol	•••	••	•••
Dibutylphthalate		••	
Dietylether		••	
Di-n-amylamine			••••
Di-n-butymine			••••
Di-n-butyl Phthalate			••••
Di-n-octyle Phthalate			
Diallylamine			•••
Diesel Fuel		•	•••
Diethanolamine			••••
Diethylamine		••	••
Dimethylsulphoxide		•	
Diisobutyl Ketone		•	
Diisobutyllamine			••••
Dimethyl Ether			•••
Dimethyl Sulfoxide			•••
Epoxy Resins, Dry	••••	•	
Ethane Gas	••••		
Ethanol	•••	••••	••••
Ethyl Acetate		••	•
Ethyl Alcohol	••••		
Ethyl Ether		•	•••
Ethylene Glycol	••••	••••	••••
Fatty Acids	••••		
Ferric Chloride	••••	••••	••••
Ferrous Sulfate	••••		
Formaldehyde	•••		••••
Formic Acid	••••	•••	•••
Freon 113 Or Tf	••••		••••
Gasoline, 40-50%			••••
Glucose			

Chemical	Nitrile	Latex	Vinyl
Glutaraldehyde, <5%			•••
Glycerine	••••	••••	••••
Glycerol	••••	••••	••••
Glycol	••••		
Grain Alcohol	•••		
Heptanes			••••
Hexamthyldisiloxane			•••
Hexane		•	••••
Hydrazine			••••
Hydrochloric Acid, Dilute	••••	••	•••
Hydroflouric Acid, Dilute			
Hypochlorites	•••		
Hydrogen Gas	••••		
Hydrogen Peroxide	•••	•••	•••
Hydrogen Sulfide	••••		
Inorganic Salts	•••		
Iron Chloride	•••		
Iron Sulfates	•••		
Isobutyl Alcohol		••••	••••
Isooctane		•	••••
Isopropanol	•••	••••	••••
Jet Fuel, <30% Aromatics			•••
2- Propanol	•••		
Kerosene			••••
Lactic Acid	•••	••••	••••
Lauric Acid	••	••	•••
Lineoleic Acid	••••		•••
Magnesium Chloride	•••		
Magnesium Sulfate	••••		
Malathion, 30-70%			••••
Maleic Acid	•••	••	•••
Methanol	•••	••••	••
Methyl Ethyl Ketone	•	••	•
Methyl Isobutyl Ketone	•		•
Mercuric Chloride		••••	••••
Mercury		••••	••••

# Glove Chemical Compatibility Chart

Chemical	Nitrile	Latex	Vinyl
Moisture			
Monoethanolamine	•	•••	•••
Muriatic Acid	••••	••••	
N-Butyl Alcohol		•••	••••
N- Methyl-2- Pyrrolidone		••••	
N-Propyl Alcohol			••••
Naptha, 15-20% Aromatics			••••
Naphthalene	•	•	
Nitric Acid <30%			••••
Nitrobenzene		••	
Octane			••••
Octyl Alcohol		•••	••••
Oleic Acid		••	••••
Oxalic Acid	•••	•••	••••
Palmitic Acid	•••	•••	••••
Pentachlorophenol		•	•••
Pentane		•	••••
Perchloric Acid, 30-70%		•	••••
Phenol	••••	•••	••••
Phosphoric Acid	•••	••	••••
Pickling Solution	•••		
Picric Acid			••••
Pine Oil	••••		
Potash Salts	••••		
Potassium Bromide	••••		
Potassium Carbonate	•••		

Chemical	Nitrile	Latex	Vinyl
Potassium Chloride	0000	0000	0000
Potassium Cyanide	••••	••••	••••
Potassium Dichromate	••••	•••	••••
Potassium Ferrocyanide	••••		
Potassium Hydroxide		•••	••••
Potassium			
Potassium Iodide		•••	••••
Potassium Nitrite	••••		
Potassium Phosphate	•••		
Potassium Silicate	•••		
Potassium Sulfate	••••	•••	••••
Potassium Sulfide	••••		
Potassium Thiosulfate	•••		
Propan-2-Ol		••••	
Propyl Alcohol	•••	•••	••••
Propylene Glycol		••••	••••
Rust Inhibitors		••••	••••
Rock Salt	••••		
Salt Spray	••••		
Sodium Acetate		••••	•••
Sodium Azide		••••	••••
Sodium Bicarbonate		••••	••••
Sodium Carbonate	••••		••••
Sodium Chloride	••••	••••	••••
Sodium Cyanide	••••	••••	••••
Sodium Hydroxide	••••	••••	••••

Chemical	Nitrile	Latex	Vinyl
Sodium Hypochorite	•••	••	••••
Sodium Nitrate	••••		
Sodium Phosphate	•••		
Sodium Silicate	••••		
Sodium Sulfate	••••		
Sodium Sulphite	••••		
Sodium Thiosulfate	••••		••••
Stearic Acid	•••		
Sulfur Dioxide	••••		
Sulfuric Acid (Dilute)	•••	•	••
Sulfurous Acid (75-100%)	•		•
Tannic Acid	••••	••••	•••
1,2,4,5- Tetrachl orobenzen			••••
Tetrahydrofuran	•	•	••
Triethanolamine	•••	••••	••••
Turpentine	••	•	••••
Vegetable Oils	•••		
Water (Soapy)	••••	••••	••••
Water (Distilled)	••••	••••	••••
Water (Fresh)	••••	••••	••••
Water (Salt)	••••	••••	••••
Wood Alcohol	•••		
Xylene	•	•	••
Zinc Salts	•••		

\*Testing Methods are based on BS-CEN369 and BS-CEN 374 Part (which are very identical to ASTM-F-739)

Resistance		Permeation 1ug/cm2/second
Excellent Good	••••	>300 181 - 300
Poor Not Recommended	•	20 – 60 <20

#### \*Remark:

Gloves do not provide unlimited protection against all chemicals, and the user must determine before use that the glove will resist permeation and degradation by the chemicals (including chemical mixtures) in the environment of intended use. Variability in material thickness, chemical concentration, length of exposure to chemicals and temperature will affect specific performance.



### Nitrile and Latex Comparison



Nitrile has only been on the scene as a clean and reliable choice for cleanroom operators for the past decade. While Latex is made from organic tree sap and contains allergy-causing proteins recognized by the FDA, Nitrile is manufactured from a 100% inorganic synthetic material. Nitrile gloves provide superior barrier protection, minimize the risk of allergic reactions and possess excellent electrostatic discharge (ESD) properties. Nitrile is presently the best choice for operator comfort due to its remarkable memory-membrane. This feature allows a nitrile glove to adapt to each individual's hand, improving motion and minimizing fatigue.

Nitrile and Latex Characteristics Comparison					
	Particle Count	Extractable Count	ESD Properties	Dexterity	Chemical Compatibility
Nitrile	++	++	+	++	++
Latex	-	-	-	+	+
- Poor + Good ++ Excellent					



Valutek's gloves are packed in double poly bags, vacuum sealed, flat packed in carton boxes and with a carton liner.

All gloves are controlled environment compatible, lot traceable with retention samples held in Quality Control for 36 months from date of manufacturing.

Vacuum seal benefit: better storage, no particulate release, no ESD issue.



ISO 7+ (Class 10.000+)

















### **Cleanroom Glove Packaging**



Controlled environment gloves are flat packaged in a critical environment with the cuffs all to one end in two stacks of 50 each, double poly-bagged 100 per pack, 10 packs per case in a carton liner to ensure product integrity. Boxed gloves are not.

Over 98% of thin-wall, powder-free gloves are used in medical / lab / industrial applications. Operators of controlled environments often unknowingly procure a glove not designed to their application. Powder-free lab / industrial / medical grade boxed gloves are not suitable for a controlled environment because:

Boxed gloves are powder-free, not particulate-free. Uncoated chipboard dispenser boxes shed particles, and contaminate the powder-free gloves.

Dispenser boxes forces operators to contaminate glove when donning. Operators' bare hand should only make cuff contact.

Additives and fillers are often used in boxed gloves which reduce ESD compatibility (surface resistivity), and negatively impact glove cleanliness.

No post-processing to reduce surface contamination left from the dipping process.

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### **Glove Donning Procedure**

It only takes one uncleaned hand to contaminate the entire controlled environment, follow proper glove donning procedure to minimize cross-contamination, and to keep your process contaminant free.



**Step 1**: Wash hands thoroughly and dry



the beaded cuff of the

glove.

**Step3**: Don the first glove by sliding one-hand in while holding the cuff with the other hand.



**Step 4**: Adjust the fitness of the glove only by contacting the cuff, avoid touching elsewhere.

Step 5: Don second glove by using the gloved hand to pick up the cuff, repeat step 3 and 4. Step 6: If double donning is desired, respeat step 2 to 5 with a second set of gloves after apparel gowning.

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#### PVC Powder-Free Cleanroom 12" Glove (PDF)

- Polyvinyl chloride plastic material
- 12"/290mm length with beaded long cuff
- Ambidextrous shape
- Disposable and light weight
- Light bisque texture
- ESD compliant
- Low levels of particulate and extractable counts

This cleanroom packaged glove is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is also recommended for use in a variety of applications including electronics, pharmaceutical, laboratory and device manufacturing.





Part Number	Size	Packaging	Total/Case
VTGVCRB12-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGVCRB12-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGVCRB12-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGVCRB12-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case



#### Latex Powder-Free 9" Glove **PDF**

- 100% natural latex material provides the highest degree of dexterity
- 9"/230mm length with beaded cuff
- Ambidextrous shape
- Fully textured and smooth palm design
- Powder-free, double chlorination, filtered water rinse
- Moderate acid compatibility
- Cleanroom compatible packaging for proper donning

This cleanroom packaged glove is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is also commonly used in a wide variety of applications including laboratories, general industry, food processing and service, janitorial/sanitation, pharmaceutical handling, electronics assembly and light-duty maintenance and cleanup.



Caution: This product contains natural rubber latex which may cause allergic reactions in some individuals.







#### Latex Powder-Free 12" Glove PDF

- 100% natural latex material provides the highest degree of dexterity
- Cleanroom compatible packaging for proper donning
- 12"/290mm length with beaded long cuff
- Fully textured and smooth palm design
- Powder-free, double chlorination, filtered water rinse
- Moderate acid compatibility

This cleanroom packaged glove is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is also commonly used in a wide variety of applications including laboratories, general industry, food processing and service, janitorial/ sanitation, pharmaceutical handling, electronics assembly and light-duty maintenance and cleanup.

Caution: This product contains natural rubber latex which may cause allergic reactions in some individuals.

Packaging

VIGLPFB12-SIVI	SIVI	100 ea/bag, 10 bags/case	1000 ea/case
VTGLPFB12-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGLPFB12-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGLPFB12-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case
VTGLPFB12-2X	2X	100 ea/bag, 10 bags/case	1000 ea/case

#### Multi-Task 'Arizona Blue' Nitrile Glove PDF

100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)

Size

Accelerator & sulfur free

Part Number

.....

- Cleanroom compatible packaging for proper donning
- 9"/230 mm length with beaded cuff
- Textured fingertips
- Powder-free, single chlorination
- ESD compliant

This cleanroom packaged glove is recommended for use in a cleanroom Class 10.000+ (ISO7+) critical environment. It is also recommended for non-sterile Life Science applications (Medical device and Pharmaceutical), as well as general purpose, non-critical applications. It is also suitable as a donning glove.

Part Number	Size	Packaging	Total/Case
VTGNMTPFB90AB-XS	XS	100 ea/bag, 10 bags/case	1000 ea/case
VTGNMTPFB90AB-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGNMTPFB90AB-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGNMTPFB90AB-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGNMTPFB90AB-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case
VTGNMTPFB90AB-2X	2X	100 ea/bag, 10 bags/case	1000 ea/case





Total/Case









Latex



LATEX FREE

#### Nitrile Powder-Free 9.5" Glove PDF

- 100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)
- Accelerator & sulfur free
- Contains no fillers, silicones or plasticizers
- 9.5"/240 mm length with beaded long cuff
- Textured fingertips
- Powder-free, double chlorination, filtered water rinse
- ESD compliant and acid and solvent compatible

This cleanroom packaged glove is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is also commonly used in a wide variety of applications including semiconductor, pharmaceutical, food handling, laboratory work, electronic, intricate parts handling, and maintenance and cleanup.



Part Number	Size	Packaging	Total/Case
VTGNPFB95-XS	XS	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB95-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB95-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB95-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB95-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case

#### Nitrile Powder-Free 12" Glove PDF

- 100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)
- Accelerator & sulfur free
- Contains no fillers, silicones or plasticizers
- 12"/290 mm length with beaded long cuff
- Textured fingertips
- Powder-free, double chlorination, filtered water rinse
- ESD compliant and acid and solvent compatible

This cleanroom packaged glove is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is also commonly used in a wide variety of applications, including semiconductor, pharmaceutical, food handling, laboratory work, electronic, intricate parts handling, and maintenance and cleanup.





Part Number	Size	Packaging	Total/Case
VTGNPFB12-XS	XS	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB12-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB12-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB12-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB12-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB12-2X	2X	100 ea/bag, 10 bags/case	1000 ea/case

Nitrile
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## Ultra Thin Nitrile Powder-Free 9.5" Glove PDF

- 100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)
- Accelerator & sulfur free
- Contains no fillers, silicones or plasticizers
- 9.5"/240mm length with beaded standard cuff
- Textured fingertips
- Powder-free, double chlorination, filtered water wash
- ESD compliant and acid and solvent compatible

This cleanroom packaged glove is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is also commonly used in a wide variety of applications, including semiconductor, pharmaceutical, food handling, laboratory work, electronic, intricate parts handling, and maintenance and cleanup.

Packaging

100 ea/bag, 10 bags/case

100 ea/bag, 10 bags/case

100 ea/bag, 10 bags/case

100 ea/bag, 10 bags/case

Nitrile Cleanroom 12" Glove PDF

• 100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)

Size

SM

MD

LG

XL

Accelerator & sulfur free

Part Number

VTGNUTPFB95-SM

VTGNUTPFB95-MD

VTGNUTPFB95-LG

VTGNUTPFB95-XL

- 12"/290 mm length with beaded long cuff
- Textured fingertips
- Powder-free, double chlorination, 18 mega ohm D.I. water rinse
- Low levels of particles and extractable counts
- ESD compliant and acid and solvent compatible

This cleanroom packaged glove is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is also recommended for use in a wide variety of applications that require an extremely clean glove such as wafer fabrication, disk drives, semiconductor, biotechnology, non-aseptic pharmaceutical and optics.

Part Number	Size	Packaging	Total/Case
VTGNCRB12-XS	XS	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRB12-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRB12-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRB12-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRB12-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRB12-2X	2X	100 ea/bag, 10 bags/case	1000 ea/case













Total/Case

1000 ea/case

1000 ea/case

1000 ea/case

1000 ea/case

Nitrile

Nitrile

LATEX

FREE



## Sterile Nitrile Cleanroom 12" Glove PDF

- 100% Clean, synthetic nitrile polymer material (Acrylonitrile Butadiene)
- Gamma irradiated
  - 12"/290mm length with beaded long cuff
  - Textured fingertips
  - Powder-free, double chlorination, 18 mega ohm D.I water rinse
  - Low levels of particles and extractable counts
  - ESD compliant, acid and solvent compatible

This cleanroom packaged glove is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is also commonly used in ster-ile environments and industries that require a very clean glove such as pharmaceutical, biotechnology, and medical device manufacturing.





Part Number	Size	Packaging	Total/Case
VTGNCRBIR12-XS	XS	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRBIR12-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRBIR12-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRBIR12-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRBIR12-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRBIR12-2X	2X	100 ea/bag, 10 bags/case	1000 ea/case



Sterile Nitrile



# Complete protection, great comfort



## Apparel Selection Guide

## **Cleanroom Apparel**

Clean environments, by their nature, require separation of the product and operating personnel. Protective apparel provides that barrier. It keeps away the contamination generated by operating personnel from the process and the product and in addition protects the operator from working environment in the facilities where the process or product is dangerous or harmful. Valutek offers apparel from headwear to footwear to ensure full protection and separation.

70% contamination is operator based. Cleanroom apparel provides full coverage to the operator and minimizes this contamination to ensure the cleanliness of the controlled environment

## **Apparel Substrates**

Spunbond Polypropylene (PP)



This material is made from 100% virgin spunbond polypropylene; it is ideal as an undergarment (i.e. bouffant cap, shoe cover). This non-woven, lightweight, breathable fabric provides a low-cost solution for protection against dry particulates.

### Polyethylene Coated Polypropylene (PCPP)



This material is as same as polypropylene, but with a polyethylene coating. PCPP is also impervious to liquids, lint-free, and has excellent tensile and tear resistance. It pro-

vides economical protection to workers exposed to splashes from certain chemicals, blood, and particulates.

### Cross-linked Polyethylene (CPE)



This material is an economical alternative when a low particulate material is required. Low density CPE is impervious to liquids, lint-free, and does not run or bleed when exposed to water.

### Microporous (MP)

MP is a highly breathable, non-linting film that is bonded with a nonwoven fabric, offering an ultra-cool, comfortable alternative to TYVEK or other similar materials. It provides superior per-

formance against non-toxic particulates, liquids, spray and dust.

## Apparel Packaging

Valutek's apparel are packed in double poly bags, vacuum sealed, flat packed in carton boxes and with a carton liner.

Critical environment compatible. All apparel is lot traceable with retention samples held in Quality Control for 36 months from date of manufacturing.

Vacuum seal benefit: better storage, no particulate release, no ESD issue.



MacroTek ISO 7+ (Class 10.000+)

















#### Spunbond Polypropylene Bouffant Cap (PDF)

- 100% non-linting, non-woven spunbond polypropylene fabric
- Disposable, comfortable with great breathability
- Filament covered, unexposed elastic edge design for secure fit and closure
- Can be worn with a hood for added protection
- Available in both standard weight and heavyweight versions

The bouffant caps are recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment.

1acroTek ISO 7+ (Class 10.000+)

Part Number	Size	Color	Weight	Packaging	Total/Case
VTBFCW-21	21"	White	11 gsm	100 ea/bag, 10 bags/case	1000 ea/case
VTBFCWHW-21	21"	White	17 gsm	100 ea/bag, 10 bags/case	1000 ea/case
VTBFCW-24	24"	White	11 gsm	100 ea/bag, 10 bags/case	1000 ea/case
VTBFCBL-24	24"	Blue	11 gsm	100 ea/bag, 10 bags/case	1000 ea/case
VTBFCWHW-24	24"	White	17 gsm	100 ea/bag, 10 bags/case	1000 ea/case



#### **Microporous Hood** (PDF)

- 100% non-linting microporous film bonded with a non-woven fabric
- Disposable, lightweight comfortable with high breathability
- Superior barrier protection against non-toxic particulates, liquids, sprays and dust

This hood is recommended for either stringent industrial or demanding cleanroom applications. This hood is ideal for use in a cleanroom Class 1-10 (ISO 3-4) critical environment that requires high contamination control and cleanliness.





LATEX FREE

Part Number	Size	Color	Packaging	Total/Case
VTMHOOD-U	Universal	White	20 ea/bag, 5 bags/case	100 ea/case



#### Spunbond Polypropylene Beard Cover (PDF)

- 100% non-linting, non-woven spunbond polypropylene fabric
- Disposable, comfortable with full coverage
- Filament covered, unexposed elastic band for secure fit and closure
  - Available in both standard weight and heavyweight versions



The beard covers are recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment.



Part Number	Size	Color	Weight	Packaging	Total/Case
VTBCV-18	18"	White	11 gsm	100 ea/bag, 10 bags/case	1000 ea/case
VTBCV-21	21"	White	11 gsm	100 ea/bag, 10 bags/case	1000 ea/case
VTBCVHW-18	18"	White	17 gsm	100 ea/bag, 10 bags/case	1000 ea/case

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eadweal

Part Number	Style	Color	Packaging	Total/Case	FREE
VTMASKELR-WH	Elastic ear loops	White	50 ea/bag, 20 bags/case	1000 ea/case	
VTMASKELR-BL	Elastic ear loops	Blue	50 ea/bag, 20 bags/case	1000 ea/case	
VTMASKHB-WH	Head Band	White	50 ea/bag, 20 bags/case	1000 ea/case	

## 3-Ply Polypropylene Face Mask [PDF]

- 3-ply material provides excellent guard against bacteria and particulates
- Malleable aluminum noseband ensures adjustable proper seal and perfect fitting
- Disposable, lightweight with very low breathing resistance
- High filtration capacity
- Without glass fibers
- Available in both elastic ear loops and head band design

The facemasks are recommended for use in a cleanroom Class 100-1.000 (ISO 5-6) critical environment.

#### Spunlace Non-Woven Face Veil (PDF)

- 55% polyester and 45% cellulose non-linting fabric
- Malleable aluminum nosepiece ensures adjustable proper seal and perfect fitting
- Disposable, lightweight with very low breathing resistance
- Elastic head band design

The face veils are recommended for use in a cleanroom Class 100-1.000 (ISO 5-6) critical environment.





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Micro lek ISO 5-6 (Class 100- 1.000)

MicroTek ISO 5-6 (Class 100- 1.000)



## Valutek Garment Sizing Chart



Valutek Coverall Sizing Chart											
Size	Length	Chest Width	Sleeve Length	Leg Length	Boot Length	Boot Height					
SM	63¾″	23″	33″	28¼″	10″	6″					
MD	65¾″	24"	34"	28¾"	11¼″	6"					
LG	67¼"	25″	35″	29″	13¼″	6″					
XL	70″	27"	36¼"	30″	15″	6″					
XXL	72″	29½″	37″	31½"	15″	6"					
XXXL	74½″	31½″	38″	32½"	15″	6″					
XXXXL	75½"	32½"	40″	33″	15″	6″					





Valutek Lab Coat Sizing Chart										
Size	Length	Chest Width	Sleeve Length							
SM	38½"	25″	34"							
MD	40″	26"	34½"							
LG	41″	27½"	35½"							
XL	421⁄2″	28¼″	36¼"							
XXL	44"	30"	37½"							
XXXL	45½″	31″	39″							
XXXXL	46½"	32″	40½"							

#### Spunbond Polypropylene Lab Coat (PDF)

- 100% non-linting, non-woven, spunbond polypropylene fabric
- Disposable, lightweight and breathable
- Knee length with 5 snap closures, no pockets, elastic cuffs and a single ply shirt collar design
- Color option: white

This lab coat is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment. It is commonly used in electronic, medical device, and pharmaceutical industries where operator garment contamination is a concern. It is also highly suitable for a wide variety of macro contamination level applications, such as basic manufacturing, MDM and injection molding.

Part Number	Size	Length	Chest Width	Sleeve Length	Packaging	Total/Case
VTLBCT-SM	SM	38½"	25″	34"	10 ea/bag, 3 bags/case	30 ea/case
VTLBCT-MD	MD	40"	26″	34½"	10 ea/bag, 3 bags/case	30 ea/case
VTLBCT-LG	LG	41"	27½"	35½"	10 ea/bag, 3 bags/case	30 ea/case
VTLBCT-XL	XL	42½"	28¼"	36¼"	10 ea/bag, 3 bags/case	30 ea/case
VTLBCT-2X	XXL	44"	30"	37½"	10 ea/bag, 3 bags/case	30 ea/case
VTLBCT-3X	XXXL	45½"	31"	39″	10 ea/bag, 3 bags/case	30 ea/case
VTLBCT-4X	XXXXL	46½"	32"	40½"	10 ea/bag, 3 bags/case	30 ea/case



MacroTek

TEX REE



## Polyethylene Coated Polypropylene Lab Coat PDF

- 100% non-linting, non-woven, spunbond polypropylene coated with polyethylene
- Disposable, lightweight and breathable
- Knee length with 5 snap closures, no pockets, elastic cuffs and a single ply shirt collar design
- Superior barrier protection against non-toxic particulates, liquids, sprays and dust
- Color option: white

This lab coat is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment. It is commonly used in electronic, medical device, and pharmaceutical industries where operator garment contamination is a concern. It is also highly suitable for a wide variety of macro contamination level applications, such as basic manufacturing, MDM and injection molding.



Part Number	Size	Length	Chest Width	Sleeve Length	Packaging	Total/Case
VTLBCTC-SM	SM	38½"	25″	34"	10 ea/bag, 3 bags/case	30 ea/case
VTLBCTC-MD	MD	40"	26″	34½"	10 ea/bag, 3 bags/case	30 ea/case
VTLBCTC-LG	LG	41"	27½"	35½"	10 ea/bag, 3 bags/case	30 ea/case
VTLBCTC-XL	XL	42½"	28¼"	36¼"	10 ea/bag, 3 bags/case	30 ea/case
VTLBCTC-2X	XXL	44"	30"	37½"	10 ea/bag, 3 bags/case	30 ea/case
VTLBCTC-3X	XXXL	45½"	31"	39″	10 ea/bag, 3 bags/case	30 ea/case
VTLBCTC-4X	XXXXL	46½"	32″	40½"	10 ea/bag, 3 bags/case	30 ea/case



LATEX FREE

## Microporous Lab Coat PDF

- 100% non-linting microporous film bonded with a non-woven fabric
- Disposable, lightweight and highly breathable
- Knee length with a zipper closure, one pocket, elastic cuffs and a single ply shirt collar design
- Color option: white

This lab coat is recommended for either stringent industrial or demanding cleanroom applications. This lab coat is ideal for use in a cleanroom Class 1-10 (ISO 3-4) critical environment that require high contamination control and cleanliness.



Part Number	Size	Length	Chest Width	Sleeve Length	Packaging	Total/Case
VTMLBCTZ-SM	SM	38½"	25″	34"	5 ea/bag, 6 bags/case	30 ea/case
VTMLBCTZ-MD	MD	40"	26″	34½"	5 ea/bag, 6 bags/case	30 ea/case
VTMLBCTZ-LG	LG	41"	27½"	35½"	5 ea/bag, 6 bags/case	30 ea/case
VTMLBCTZ-XL	XL	42½"	28¼"	36¼"	5 ea/bag, 6 bags/case	30 ea/case
VTMLBCTZ-2X	XXL	44″	30″	37½"	5 ea/bag, 6 bags/case	30 ea/case
VTMLBCTZ-3X	XXXL	45½"	31"	39"	5 ea/bag, 6 bags/case	30 ea/case
VTMLBCTZ-4X	XXXXL	46½"	32″	40½"	5 ea/bag, 6 bags/case	30 ea/case



## Spunbond Polypropylene Coverall PDF

- 100% non-linting, non-woven, spunbond polypropylene fabric
- Disposable, lightweight and breathable full body protection
- Zipped closure, elastic wrist and ankle cuffs and a single shirt collar design
- Color option: white

This coverall is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment. It is commonly used in electronic, medical device, and pharmaceuti-cal industries where operator garment contamination is a concern. It is also highly suitable for a wide variety of macro contamination level applications, such as basic manufacturing, MDM and injection molding.



Part Number	Size	Length	Chest Width	Sleeve Length	Leg Length	Packaging	Total/Case
VTCVRL-SM	SM	63¾"	23″	33″	28¼"	5 ea/bag, 5 bags/case	25 ea/case
VTCVRL-MD	MD	65¾"	24"	34″	28¾"	5 ea/bag, 5 bags/case	25 ea/case
VTCVRL-LG	LG	67¼	25″	35″	29"	5 ea/bag, 5 bags/case	25 ea/case
VTCVRL-XL	XL	70"	27"	36¼"	30″	5 ea/bag, 5 bags/case	25 ea/case
VTCVRL-2X	XXL	72″	29½"	37"	31½"	5 ea/bag, 5 bags/case	25 ea/case
VTCVRL-3X	XXXL	74½"	31½"	38″	32½"	5 ea/bag, 5 bags/case	25 ea/case
VTCVRL-4X	XXXXL	75½"	32½"	40"	33"	5 ea/bag, 5 bags/case	25 ea/case







## Microporous Coverall PDF

- 100% non-linting microporous film bonded with a non-woven fabric
- Disposable, lightweight and breathable full body protection
- Zipped closure with a flap, elastic wrist and ankle cuffs and a single shirt collar design
- Superior barrier protection against non-toxic particulates, liquids, sprays and dust
- Color option: white

This coverall is recommended for either stringent industrial or demanding cleanroom applications. This coverall is ideal for use in a cleanroom Class 1-10 (ISO 3-4) critical environment as well as other critical areas that require high contamination control and cleanliness.



Part Number	Size	Length	Chest Width	Sleeve Length	Leg Length	Packaging	Total/Case
VTMCVRL-SM	SM	63¾″	23″	33"	28¼″	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRL-MD	MD	65¾″	24"	34"	28¾″	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRL-LG	LG	67¼	25″	35″	29"	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRL-XL	XL	70″	27"	36¼"	30″	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRL-2X	XXL	72″	29½"	37"	31½"	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRL-3X	XXXL	74½"	31½"	38"	32½"	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRL-4X	XXXXL	75½"	32½"	40"	33″	5 ea/bag, 5 bags/case	25 ea/case



LATEX FREE

## Microporous Coverall with Hood and Boots [PDF]

- 100% non-linting microporous film bonded with a non-woven fabric
- Disposable, lightweight and highly breathable
- Zipped closure with a flap, elastic wrist and ankle cuffs, with an elastic hood and attached anti-skid PVC sole boot covers
- Superior barrier protection against non-toxic particulates, liquids, sprays and dust
- Color option: white

This coverall is recommended for either stringent industrial or demanding cleanroom applications. This coverall is ideal for use in a cleanroom Class 1-10 (ISO 3-4) critical environment as well as other critical areas that require high contamination control and cleanliness.



Part Number	Size	Length	Chest Width	Sleeve Length	Leg Length	Boot Length	Packaging	Total/Case
VTMCVRLHB-SM	SM	63¾″	23″	33″	28¼"	10"	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRLHB-MD	MD	65¾″	24"	34"	28¾"	11¼"	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRLHB-LG	LG	67¼	25″	35″	29″	13¼″	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRLHB-XL	XL	70″	27"	36¼"	30″	15″	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRLHB-2X	XXL	72″	29½"	37″	31½"	15″	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRLHB-3X	XXXL	74½"	31½"	38″	32½"	15″	5 ea/bag, 5 bags/case	25 ea/case
VTMCVRLHB-4X	XXXXL	75½"	32½"	40″	33"	15″	5 ea/bag, 5 bags/case	25 ea/case



LATEX FREE

## Spunbond Polypropylene Sleeve PDF

- 100% non-linting, non-woven spunbond polypropylene fabric
- Disposable, lightweight and breathable
- Non-latex elastic cuffs at the wrist and arm

This sleeve is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment.

Part Number	Size	Color	Packaging	Total/Case
<u>VTSLV-18</u>	18"	White	10 ea/roll, 10 rolls/bag, 2 bags/case	200 ea/case
VTSLV-21	21″	White	10 ea/roll, 10 rolls/bag, 2 bags/case	200 ea/case

### Polyethylene Coated Polypropylene Sleeve PDF

- 100% non-linting, non-woven, spunbond polypropylene coated with polyethylene
- Disposable, lightweight and breathable
- Non-latex elastic cuffs at the wrist and arm

This sleeve is recommended for use in a cleanroom Class 100-1.000 (ISO 5-6) critical environment. It is also commonly used in applications where durability, liquid protection and cleanliness are of great importance.



### Microporous Sleeve PDF

- 100% non-linting microporous film bonded with a non-woven fabric
- Disposable, lightweight and breathable
- Non-latex elastic cuffs at the wrist and arm

This sleeve is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment.

Part Number	Size	Color	Packaging	Total/Case
VTMSLV-18	18"	White	50 ea/bag, 4 bags/case	200 ea/case
VTMSLV-21	21″	White	50 ea/bag, 4 bags/case	200 ea/case



MacroTek

ISO 7+ (Class 10.000+)

MicroTek

ISO 5-6 (Class 100- 1.000)





LATEX FREE Sleeves

## Valutek Shoe Cover Sizing Chart



General Shoe Cover Sizing Chart							
Size	Length	Height					
MD	14"	6″					
LG	16″	6″					
XL	18″	6″					



PVC Sole Shoe Cover Sizing Chart								
Size	Length	Height	Sole Width					
SM	10"	6″	4¼"					
MD	11¼"	6"	4¼"					
LG	13¼″	6"	41⁄2″					
XL	14¼″	6″	4¾″					
2X	15″	6″	4¾″					

PVC Sole Boot Cover Sizing Chart									
Size	Length	Height	Sole Width						
MD	11¼″	18″	4¼"						
LG	13¼″	18″	4¾"						
XL	15″	18″	4¾″						



## Valutek Shoe Cover Conversion Chart



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## Spunbond Polypropylene Shoe Cover [PDF]

- 100% non-linting, non-woven spunbond polypropylene fabric with stitched seams
- Disposable, lightweight, strong and durable
- Elastic ankle cuffs

This shoe cover is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment.



Part Number	Size	Length	Height	Color	Packaging	Total/Case
VTSHCVPP-LG	LG	16"	6″	Blue	100 ea/bag, 3 bags/case	300 ea/case
VTSHCVPP-XL	XL	18″	6″	Blue	100 ea/bag, 3 bags/case	300 ea/case



## Anti-Skid Polypropylene Shoe Cover [PDF]

- 100% non-linting, non-woven spunbond polypropylene fabric with stitched seams
- Disposable, lightweight, strong and durable
- Elastic ankle cuffs
- Sprayed latex anti-skid treads on the bottom for safety

This shoe cover is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment. It is also commonly used for protecting against dirt, grime, and certain dry particulates in nonhazardous environments.



MacroTek ISO 7+ (Class 10.000+)



Part Number	Size	Length	Height	Color	Packaging	Total/Case
VTSHCVAS-MD	MD	14"	6″	Blue	100 ea/bag, 3 bags/case	300 ea/case
VTSHCVAS-LG	LG	16"	6″	Blue	100 ea/bag, 3 bags/case	300 ea/case
VTSHCVAS-XL	XL	18″	6″	Blue	100 ea/bag, 3 bags/case	300 ea/case



Footwea

## Anti-Skid Polypropylene ESD Shoe Cover [PDF]

- 100% non-linting, non-woven spunbond polypropylene fabric with stitched seams
- Disposable, lightweight, strong and durable
- Elastic ankle cuffs
- Sprayed latex anti-skid treads on the bottom for safety
- A 19.6" long conductive ribbon stitched on a solid seam to provide ESD grounding

This shoe cover is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment. It is commonly used for protecting against dirt, grime and certain dry particulates in nonhazardous environments and for protecting sensitive devices in the work area.



MacroTek ISO 7+ (Class 10.000+)



Part Number	Size	Length	Height	Color	Packaging	Total/Case
VTSHCVASESDLF-L	LG	16″	6″	Blue	100 ea/bag, 3 bags/case	300 ea/case
VTSHCVASESDLF-X	XL	18″	6″	Blue	100 ea/bag, 3 bags/case	300 ea/case

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Footwea

- 100% cross-linked polyethylene with heat-sealed seams
- Disposable, lightweight, strong and durable
- Elastic ankle cuffs
- Impervious to non-hazardous liquids
- Available in lightweight, standard weight and heavy weight versions

This shoe cover is recommended for use in a cleanroom Class 100 -1.000 (ISO 5-6) critical environment. It is the most economical shoe cover available that provides full liquid protection and is commonly used in microelectronics and pharmaceutical industries.

Part Number	Size	Length	Height	Thickness	Color	Packaging	Total/Case
VTSHCVPLLW-BL	LG	16"	6″	3 mil	blue	100 ea/bag, 10 bags/case	1000 ea/case
VTSHCVPL-WH	LG	16"	6″	5 mil	white	100 ea/bag, 3 bags/case	300 ea/case
VTSHCVPL-BL	LG	16"	6"	5 mil	blue	100 ea/bag, 3 bags/case	300 ea/case
VTSHCVPLHW-BL	LG	16"	6″	8 mil	blue	100 ea/bag, 3 bags/case	300 ea/case
VTSHCVPLHWX-BL	XL	18″	6″	8 mil	blue	100 ea/bag, 3 bags/case	300 ea/case
VTSHCVPLHWX-WH	XL	18"	6″	8 mil	white	100 ea/bag, 3 bags/case	300 ea/case

## Polyethylene Coated Polypropylene PVC Sole Shoe Cover PDF

- 100% non-linting, non-woven, spunbond polypropylene coated with polyethylene
- Disposable, lightweight and breathable
- Stitched seams and elastic ankle cuffs
- Anti-skid PVC sole provides excellent protection against wet and smooth surfaces
- Superior coefficient of friction

This shoe cover is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment that requires high contamination control and cleanliness.

Part Number	Size	Length	Height	Sole Width	Color	Packaging	Total/Case
VTSHCVPPLVW-SM	SM	10"	6″	4¼"	white	50 ea/bag, 4 bags/case	200 ea/case
VTSHCVPPLVW-MD	MD	11¼"	6″	4¼"	white	50 ea/bag, 4 bags/case	200 ea/case
VTSHCVPPLVW-LG	LG	13¼"	6″	4¾"	white	50 ea/bag, 4 bags/case	200 ea/case
VTSHCVPPLVW-XL	XL	15″	6"	4¾"	white	50 ea/bag, 4 bags/case	200 ea/case





ISO 5-6 (Class 100- 1.000)

Footweal

Footwear

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Footweal

## Valutek PE-Coated Polypropylene Non-Skid Shoe Cover [PDF]

- Clean, low-linting, and latex free fabric
- Non-skid PVC sole provides excellent protection against wet and smooth surfaces
- Superior coefficient of friction

This shoe cover is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment that requires high contamination control and cleanliness.



)	Part Number	Size	Length	Height	Sole Width	Color	Packaging	Total/Case
	VTSHCVPPLWNE-SM	SM	10"	6″	4¼"	white	50 ea/bag, 4 bags/case	200 ea/case
	VTSHCVPPLWNE-MD	MD	11¼"	6″	4¼"	white	50 ea/bag, 4 bags/case	200 ea/case
	VTSHCVPPLWNE-LG	LG	13¼"	6″	41⁄2″	white	50 ea/bag, 4 bags/case	200 ea/case
	VTSHCVPPLWNE-XL	XL	14¼"	6″	4¾"	white	50 ea/bag, 4 bags/case	200 ea/case
	VTSHCVPPLWNE-2X	2X	15″	6″	4¾"	white	50 ea/bag, 4 bags/case	200 ea/case



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## Polyethylene Coated Polypropylene PVC Sole Boot Cover [PDF]

- 100% non-linting, non-woven, spunbond polypropylene coated with polyethylene
- Disposable, lightweight and breathable
- Stitched seams and elastic leg cuffs
- Non-skid PVC sole provides excellent protection against wet and smooth surfaces
- Superior coefficient of friction

This boot cover is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment that requires high contamination control and cleanliness.



Part Number	Size	Length	Height	Sole Width	Color	Packaging	Total/Case
VTBTCVPPLVW-MD	MD	11¼″	18″	4¼"	white	20 ea/bag, 10 bags/case	200 ea/case
VTBTCVPPLVW-LG	LG	13¼"	18″	4¾"	white	20 ea/bag, 10 bags/case	200 ea/case
VTBTCVPPLVW-XL	XL	15″	18″	4¾"	white	20 ea/bag, 10 bags/case	200 ea/case





## **Glove Liners**

# Keep operators happy



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## Glove liners, also known as under gloves, makes wearing a cleanroom glove more comfortable to the operator.

They can also double as an excellent inspection glove. Valutek glove liners are constructed of a breathable, 13-gauge, 100% virgin nylon knit, providing a comfortable buffer of air between the operator's skin and the glove.

## Independent studies have shown that glove liners will:

- Reduce the number of glove changes per day because operators' hands will not get that sticky feeling from direct contact glove.
- Eliminate operator downtime due to skin irritations and dermatitis caused by wearing glove alone.
- Increase productivity. Because happy operators are more likely to follow protocols.

All Valutek glove liners are packaged in poly bags with a carton liner in Microtek carton boxes. They are controlled environment compatible, part number and lot number traceable.









## Half Finger Nylon Glove Liners [PDF

- Non-linting, 100% knitted virgin nylon material limits skin irritation caused by direct contact with glove material
- Half finger design

Part Number

- Lightweight, durable and comfortable
- Universal size and ambidextrous shape for easy stock control

This glove liner is recommended for use in cleanroom Class 100-1000 (ISO 5-6) critical environment. Wearing under latex, PVC or nitrile gloves for operator skin protection and hand comfortability.

Color

VTGNLR-1/2UniversalWhite12 pairs/bag, 35 bags/case420 ea/case

Packaging

### Full Finger Nylon Glove Liners P

Size

- Non-linting, 100% knitted virgin nylon material limits skin irritation caused by direct contact with glove material
- Full finger design
- Lightweight, durable and comfortable
- Universal size and ambidextrous shape for easy stock control

This glove liner is recommended for use in cleanroom Class 100-1000 (ISO 5-6) critical environment. Wearing under latex, PVC or nitrile gloves for operator skin protection and hand comfortability.





cro lek

ISO 5-6 (Class 100-1.000)

MicroTek

ISO 5-6 (Class 100- 1.000)

Total/Case





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LATEX FREE

## **Adhesive Mats**

Keep a clean path to your cleanroom



## Adhesive Mat Selection Guide

## Disposable Mats

Disposable Mats are manufactured to create a stack of polyethylene film sheets coated with a specially treated pressure sensitive adhesive on the exposed and mounting surfaces. The mat adhesive film effectively captures dirt and dust from foot-traffic and equipment wheels before they enter the controlled environment being protected. There are typically 30 or 60 sheets per mat. Valutek sheets have corner tabs that are consecutively numbered to show the number of remaining sheets.

"Everyday contamination can lead to a dramatic outcome failure, and most of the contamination found in your controlled environment walks right in through the gowning room door" Greg Heiland - <u>critical-tips.com</u>

# The three key attributes Valutek 'engineers into' its adhesive mats

Mat tack level The 'tack' level is the 'stickiness' of the mat. The adhesive strength needs to be correctly balanced during manufacturing for optimal mat performance Adhesive Softness If the adhesive is too hard, particles will not transfer from the shoe or wheel to the mat. If it's too soft, adhesive transfer to the shoe or wheel can occur Film & Adhesive Thickness Typical adhesive layers have a thickness between 2 and 4 millimeters (50-100 microns). If the adhesive layer is too thin, the particles will remain on the surface and shorten the useful life of the mat

## Choosing a Mat Color Which mat is right for your specific application?



Gray mat: recommended for use in **ISO 7 + (Class 10,000+ Cleanroom)** environments or higher. Conceals dirt particles which is more aesthetic in less clean environments but unsuitable for more stringent uses. **Recommended sizes: 18" x 36" and 24" x 36"** 



Blue mat: recommended for use in **ISO 5-6 (Class 100-1,000 Cleanroom)** environments. Provides a good balance between particle visibility and aesthetic qualities. Our most popular mat type. **Recommended sizes: 24" x 36" and 26" x 45"** 



White mat: recommended for use in **ISO 3-4 (Class 1-10 Cleanroom)** environments. The combination of consistent adhesive properties and highest particle visibility make it the perfect solution for the cleanest and most critical environments.

Recommended sizes: 36" x 45", 36" x 60", and 36" x 72"

## Choose a Mat Size

To determine your correct mat size, observe the position, type and size of the doorway you wish to protect, as well as foot and cart traffic patterns entering and leaving the controlled environment

## Selection Tip: Avoid 'tiling' mats

Avoid 'tiling' multiple mats at a doorway entrance, as this decreases performance. For example, if the doorway leading to your cleanroom is 36" wide, we recommend spanning the entire entrance with one 36" wide mat. Tiling mats allows particulates to become trapped between mat joints and create a cross contamination risk. (In this example, avoid using two 18" mats side-by-side to create a 36" surface). Also, when changing sheets, remember to start at the tabbed corner (which should be closest to the doorway), and work your way into the middle, rolling the waste film into a ball as you go.



## Remember:

**1.** The more critical the clean-room, the larger the mat size

**2.** Choose a size large enough that individuals will not be able to avoid walking on the mat.

Adhesive mats sizes: 18"x36", 18"x45", 24"x36", 26"x45", 36"x36", 36"x45", 36"x60", 36"x72".

## What makes Valutek's Adhesive Mats the market leader?

- Each mat sheet removes up to 95% of particles at .30-micron range
- Thicker than competitor mats at 0.05 microns film thickness
- Sheet corner labelled tabs assist in removing layers easily & tracking layer usage
- Our standard adhesive mats contain an anti-microbial agent to help kill live bacteria
- Optimized adhesive strength 'tack' formulation on all mat sizes
- Eco-friendly odorless water-based adhesive used in all mats
- Valutek product quality & innovation 'engineered in'
- Unique packaging to protect against damage & ensure product authenticity
- Valutek's renowned customer service & unconditional product guarantee

## Click here to download the detailed Adhesive Mat Installation Guide

## Adhesive Mat PDF

- 30-layer low density polyethylene adhesive mats
- Acrylic (water based) adhesiveness
- Can Effectively capture dirt and dust from foot-traffic and equipment wheels
- Special adhesive coating provides an effective means of reducing contamination by trapping and preventing the transfer of particles

These adhesive mats are suitable for Macrotek, Microtek and Nanotek applications. The mats are ideal for a wide range of applications including cleanroom entrances, gowning rooms, laboratories or work stations that require high levels of foot-borne contamination control. Adhesive mats are widely used in a variety of industries including semiconductor, biotechnology, medical device, pharmaceutical, aerospace, automotive and construction.

#### 18" x 36"

Part Number	Layers	Color	Packaging	Total/Case
VT18364P30L-B	30	Blue	4 mats/case	120 sheets/case
VT18364P30L-W	30	White	4 mats/case	120 sheets/case
VT18364P30L-G	30	Grey	4 mats/case	120 sheets/case

#### 18" x 45"

Part Number	Layers	Color	Packaging	Total/Case
VT18454P30L-B	30	Blue	4 mats/case	120 sheets/case
VT18454P30L-W	30	White	4 mats/case	120 sheets/case
VT18454P30L-G	30	Grey	4 mats/case	120 sheets/case

#### 24" x 36"

Part Number	Layers	Color	Packaging	Total/Case
<u>VT24364P30L-B</u>	30	Blue	4 mats/case	120 sheets/case
VT24364P30L-W	30	White	4 mats/case	120 sheets/case
VT24364P30L-G	30	Grey	4 mats/case	120 sheets/case

#### 26" x 45"

Part Number	Layers	Color	Packaging	Total/Case
VT26454P30L-B	30	Blue	4 mats/case	120 sheets/case
VT26454P30L-W	30	White	4 mats/case	120 sheets/case
VT26454P30L-G	30	Grey	4 mats/case	120 sheets/case

#### 36" x 36"

Part Number	Layers	Color	Packaging	Total/Case
VT36364P30L-B	30	Blue	4 mats/case	120 sheets/case
VT36364P30L-W	30	White	4 mats/case	120 sheets/case
VT36364P30L-G	30	Grey	4 mats/case	120 sheets/case



## Adhesive Mat (Continued)

#### 36" x 45"

Part Number	Layers	Color	Packaging	Total/Case
VT36454P30L-B	30	Blue	4 mats/case	120 sheets/case
VT36454P30L-W	30	White	4 mats/case	120 sheets/case
VT36454P30L-G	30	Grey	4 mats/case	120 sheets/case

#### 36" x 60"

Part Number	Layers	Color	Packaging	Total/Case
VT36604P30L-B	30	Blue	4 mats/case	120 sheets/case
VT36604P30L-W	30	White	4 mats/case	120 sheets/case
VT36604P30L-G	30	Grey	4 mats/case	120 sheets/case

#### 36" x 72"

Part Number	Layers	Color	Packaging	Total/Case
VT36724P30L-B	30	Blue	4 mats/case	120 sheets/case
VT36724P30L-W	30	White	4 mats/case	120 sheets/case



### Adhesive Mat Frame [PDF]

- Clean and durable polystyrene material with a 1/8" thick poly-vinyl web coating
- Eliminates floor maintenance and damage resulting from mat placement on floor
- Sized accordingly to available Valutek adhesive mat sizes
- Improves floor cleaning protocol

The adhesive mat frame is intended for use with the adhesive mat. The adhesive mats can be removed and re-applied for re-use of the frame.

Part Number	Available Sizes	Color	Suit Mat Sizes	Packaging
VTFRM-2038	20" x 38"	white	18" x 36"	1 frame/case
VTFRM-2638	26" x 38"	white	24" x 36"	1 frame/case
VTFRM-2847	28" x 47"	white	26" x 45"	1 frame/case
VTFRM-3838	37" x 37"	white	36" x 36"	1 frame/case
VTFRM-3847	38" x 47"	white	36" x 45"	1 frame/case
VTFRM-3862	38" x 62"	white	36" x 60"	1 frame/case
VTFRM-3874	38" x 74"	white	36" x 72"	1 frame/case





# Cleaning and Maintenance

# Ensure your environment's clean operation



**Rigorous cleaning regimes in a controlled environment are a vital** but often overlooked activity for proper cleanroom operation. Floors, walls and ceilings are just as important to keep clean as workstations and process equipment.

A comprehensive cleanroom maintenance protocol will help ensure your facilities are operating within your specified upper and lower parameters. Valutek offers cleaning products that will ensure the cleanliness of your critical environment without generating additional contaminations.

## **Product Options**

Floor Mops Used for cleaning non-raised floors and mats, and are designed to clean large surface areas quickly and efficiently.

## Flat Mops

Highly effective for removing surface contamination from flat, textured surfaces, such as floors and tables. They are also ideal at cleaning raised floors. In addition, the 360° pivoting head makes flat mops particularly useful for cleaning vertical surfaces like walls.

### Adhesive Rollers Very effective for removing particulates on smooth, dry surfaces during unscheduled and non-evasive cleanups.

## Packaging

Valutek's cleaning products are packaged in poly bags with a carton liner in carton boxes. They are controlled environment compatible, part number and lot number traceable.









## Polyester Floor Mop Head PDF

- Made with 100% non-linting white filament polyester in strands to absorb and encapsulate liquids for maximum sorptive capacity
- Autoclavable
- Laundered and packaged in a cleanroom

This mop head is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. The mop head is compatible with a wide range of chemicals. This makes it ideal for single use of wet mopping of floors in controlled environments, such as lab and process area floor cleaning.

\* This mop head is compatible with Geerpres mop handle <u># 2640</u>, <u># 2641</u>.

Part Number	Size	Weight	Packaging	Total/Case
VTPNWMOP-716	7″ x 16″	16 oz	1 ea/bag, 20 bags/case	20 ea/case

### Tubular Polyester Cleanroom Mop Head [PDF]

- Made with 1/2" knitted tube, 100% white filament polyester in a spaghetti style looped to form edgeless tubular strands to absorb and encapsulate liquids for maximum sorptive capacity.
- Autoclavable with extremely low particle and fiber generation
- Laundered and packaged in a cleanroom

This mop head is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. This mop head is compatible with a wide range of chemicals. This makes it ideal for wet mopping of floors in controlled environments such as lab and process area floor cleaning. The durable design of this mop head allows for multiple washings. The mop head fits standard mop handles.

\* This mop head is compatible with Geerpres mop handle <u># 2640</u>, <u># 2641</u>.

Part Number	Size	Weight	Packaging	Total/Case
VTCRMOP-716	7" x 16"	16 oz	1 ea/bag, 20 bags/case	20 ea/case











Vop Hea

## Polyester Cleanroom Flat Mop Head PDF

- Made with 1/4" knitted tube, 100% white filament polyester looped to form edgeless tubular strands to absorb and encapsulate liquids for maximum sorptive capacity.
  - Flat design slides easily on walls or floors
- Autoclavable with extremely low particle and fiber generation
- Laundered and packaged in a cleanroom

This mop head is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. This mop head's unique flat design provides for smooth sliding and makes it ideal for wiping perforated floor tiles in micro-electronics applications. The mop head fits standard wall mop handles.

\* This mop head is compatible with Geerpres mop handle  $\frac{# 2668}{2653}$  and  $\frac{# 2682}{2}$ .





Part Number	Size	Weight	Packaging	Total/Case
VTCRMOPF-4516	4.5" x 16"	16 oz	1 ea/bag, 50 bags/case	50 ea/case



- Polyethylene Film Adhesive Roller PDF
- Polyethylene and acrylic solvent based adhesive sheets
- Adhesive contains bactericide for killing surface bacteria on contact
- Available in blue or white color

This adhesive roller is recommended for use in a cleanroom Class 100-1,000(ISO 5-6) critical environment that requires high contamination control and cleanliness. It is designed to effectively capture dirt and dust from smooth surfaces such as floors, walls, and ceilings in controlled environments.



Part Number	Size	Color	Packaging
VTTRLRB-9	9″	Blue	107 sheets/roll, 8 rolls/case
VTTRLRW-18	18"	White	107 sheets/roll, 4 rolls/case



## Documentation

# Contaminant - Free, Archive - Safe



## **Cleanroom Documentation**

A cleanroom environment requires a specialized paper that will not introduce any contamination like particulates or fillers. At the same time, this same paper needs to work with all traditional office equipment like high-speed laser copiers/printers. It also requires the ability to be archived for indefinite periods of time. Regular paper that used in the office is made of cellulose (wood pulp and fibers). This type of paper particulates heavily when used and is a substantial source of contamination. Cleanroom documentation is made from low particulate filler and fibers that are coated with latex, which ensure the cleanliness of your controlled environments.

## Three Paper Selection Criteria:

Base Substrate What is the paper made of? Many lower quality papers contain ash fillers, which means they will introduce particulates when torn or folded. Valutek's papers is 100% filler-free.

## Uniformity

Valutek paper goes through a stringent calendering process, which reduces the size of the fibers, forms them into a page, and provides additional stability and uniform flatness. This technical paper receives more calendaring than standard paper, and has greater success of passing through high-speed laser copiers and printers.

## Coating

Cleanroom paper should be impregnated with a synthetic coating. Beware of low-cost options, which contain lower quality latex and resin treatments.

## Packaging

Valutek's cleanroom documentation is packaged in poly bags with a carton liner in carton boxes. They are critical environment compatible, part number and lot number traceable.







## Cleanroom College Rule Spiral-Bound Notebooks [PDF]

- Synthetic polymer impregnated paper
- Semitransparent high-density polypropylene cover
- Excellent ink absorption
- IPA resistant low sodium ink printed pages have low fiber and particle generation and ionic contamination

The notebooks are commonly used for note taking, recording and data transferring in a cleanroom Class 1 -10 (ISO 3-4) critical environment. The pages of the notebooks are compatible to most inks without smearing, they also have the ability to lay flat which ensures flexibility and ease of use.

Part Number	Size	Color	Style	Packaging	Total/Case
VTNBCR-35	3″ x 5″	White	100 pages, top spiral-bound	1 ea/bag, 100 bags/case	100 ea/case
<u>VTNBCR-5585</u>	5.5″ x 8.5″	White	100 pages, side spiral-bound	1 ea/bag, 40 bags/case	40 ea/case
VTNBCR-8511	8.5″ x 11″	White	100 pages, side spiral-bound	1 ea/bag, 20 bags/case	20 ea/case

## 23 LB, Letter Size Cleanroom Paper PDF

- Special formulated with cellulose fiber, surrounded and bonded by a polymer impregnated substrate.
- Excellent ink absorption
- Improved uniformity for use with laser printers and copy machines
- Available in a variety of colors

This cleanroom paper is commonly used for note taking, laser printing and photocopies. It is also used as a form and log sheet in a cleanroom Class 1 -10 (ISO 3-4) critical environment. It is compatible to most inks without smearing while ensuring low particle and fiber generation and low ionic contamination.

Part Number	Size	Color	Weight	Packaging	Total/Case
VTCRPS23B-8511	8.5″ x 11″	Blue	23 lbs	250 sheets/ream, 10 reams/case	2500 sheets/case
VTCRPS23G-8511	8.5" x 11"	Grey	23 lbs	250 sheets/ream, 10 reams/case	2500 sheets/case
VTCRPS230-8511	8.5″ x 11″	Orange	23 lbs	250 sheets/ream, 10 reams/case	2500 sheets/case
VTCRPS23P-8511	8.5" x 11"	Pink	23 lbs	250 sheets/ream, 10 reams/case	2500 sheets/case
VTCRPS23W-8511	8.5" x 11"	White	23 lbs	250 sheets/ream, 10 reams/case	2500 sheets/case
VTCRPS23Y-8511	8.5" x 11"	Yellow	23 lbs	250 sheets/ream, 10 reams/case	2500 sheets/case



NanoTek

ISO 3-4 (Class I-10)







Paper

- Special formulated with cellulose fiber, surrounded and bonded by a polymer impregnated substrate.
- Excellent ink absorption
- Improved uniformity for use with laser printers and copy machines

This cleanroom paper is commonly used for note taking, printing, as well as a form and log sheet in a cleanroom Class 1 -10 (ISO 3-4) critical environment. It is compatible to most inks without smearing while ensuring low particle and fiber generation as well as low ionic contamination.



Part Number	Size	Color	Weight	Packaging	Total/Case
VTCRPS30B-1117	11" x 17"	Blue	30 lb	250 sheets/ream, 5 reams/case	1250 sheets/case
VTCRPS30W-1117	11" x 17"	White	30 lb	250 sheets/ream, 5 reams/case	2500 sheets/case
VTCRPS30W-8511	8.5" x 11"	White	30 lb	250 sheets/ream, 10 reams/case	2500 sheets/case



- Synthetic polymer impregnated paper
- Excellent ink absorption
- Sealed in poly bags for maximum cleanliness

This filler paper is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment.



Part Number	Size	Color	Weight	Packaging	Total/Case
VTCRPS23B-8511P	8.5″ x 11″	Blue	23 lb	250 sheets/ream, 10 reams/case	2500 sheets/case

## Cleanroom Sticky Notepad PDF

Synthetic polymer impregnated paper with removable, residue-free adhesive backing

Sealed in poly bags for maximum cleanliness

The notepads are commonly used for note taking, reminders and document annotation in a cleanroom Class 1 -10 (ISO 3-4) critical environment.



Part Number	Size	Color	Weight	Packaging	Total/Case
VTNPCR-34	3" x 4"	Blue	23 lb	100 sheets/pad, 5 pads/bag,10 bags/case	5000 sheets/case

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## ESD Cleanroom Notebook [PDF]

- High-density polypropylene cover with an impregnated antistatic property and excellent chemical resistance
- Synthetic polymer impregnated paper
- Excellent ink absorption
- IPA resistant low sodium ink printed pages have low fiber and particle generation and ionic contamination

This notebook is commonly used for note taking, recording, data transferring in a cleanroom Class 1 -10 (ISO 3-4) critical environment where ESD safety is of paramount importance. The pages of the notebook are compatible with most inks in writing without smearing, also they are rotating with ability to lay flat which ensures flexibility and ease of use.



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# Prevent discharge, protect your products


### The "other" type of contamination

Electrostatic Discharge (ESD) prevention is a serious issue in electronics, aerospace, and semiconductor industries. Invisible and undetectable, it can be more harmful than particulate contamination on a microchip. Even though sub-micron "charged particles" inside a cleanroom are invisible to the naked eye, they can cause significant damage and result in product failure. The best defense against a tribo event is proper grounding in conjunction with humidity and temperature control.

The best way to protect sensitive electronics is to ensure all operators are grounded, and to wear the appropriate gear that eliminates or dissipates static build-up. Valutek has a variety of products specially designed to meet your ESD requirements.

## Cleanroom Compatible Packaging

Valutek's ESD products are packaged in poly bags with a carton liner in carton boxes. They are critical environment compatible, part number and lot number traceable.











# What is the difference between static dissipative and anti-static materials?

Static dissipative materials will not generate a potential hazardous charge while also grounding many potentially hazardous charges. Static dissipative material is commonly used for highly sensitive electronics and is certified to meet electronic industry standards. Anti-static materials are incorporated into packaging for less sensitive and passive electronics entering a static sensitive environment. The anti-static material is similar to static dissipative material in that it will not generate a charge, but differs in that it will not dissipate a charge. In short, both static dissipative and anti-static materials reduce the risk of producing a charge, but only static dissipative protects against existing charges as well.



Wipe

ESD

#### ESD Polyester Wiper (PDF)

- 100% continuous filament, double-knit polyester fiber
- Basis weight: 155 g/m<sup>2</sup>
- Cold knife cut edges
- Chemically compatible with IPA and other common solvents
- Excellent absorbency and abrasion resistance
- Low levels of particulate and extractable counts
- Low in fibers generation

This wiper is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is commonly used in a wide variety of applications, such as optics and LCD screen cleaning, electronic manufacturing, optical cleaning and pharmaceutical manufacturing.

Part Number	S	ize	Packaging	Total/Case	
VTPNWESD-99	9″ x 9″	23 cm x 23 cm	150 ea/bag, 8 bags/case	1200 ea/case	

#### Pre-Wetted Laser-Sealed Polyester Wiper in ESD Pouch (PDF)

- 100% continuous filament, double-knit polyester fiber
- Laser sealed (thermally sealed) edge for reduced fiber contamination
- Pre-wetted with a blend of 70% IPA and 30% DI water.
- Packaged in a resealable static shield bag for ESD sensitive environments
- Very low levels of particles, fibers, ions and extractables
- The pre-wet solution increases both cleaning efficiency and cleaning protocol consistency

This pre-wetted wiper is designed for use in wet cleaning of critical surfaces where control of flammable solvents and flammable solvent concentrations is required. It is also ideal for critical wiping applications where static control is paramount.

Part Number	S	Size	IPA/DI H <sub>2</sub> 0(%)	Packaging	Total/Case
VTPNWLSI70-99F	9″ x 9″	23 cm x 23 cm	70/30	30 ea/pouch, 20 pouch/case	600 ea/case















<u>ESD Wiper Pouch</u>

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#### Nitrile Powder-Free 9.5" Glove PDF

- 100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)
- Accelerator & sulfur free
- Contains no fillers, silicones or plasticizers
- 9.5"/240 mm length with beaded long cuff
- Textured fingertips
- Powder-free, double chlorination, filtered water rinse
- ESD compliant and acid and solvent compatible

This cleanroom packaged glove is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is also commonly used in a wide variety of applications including semiconductor, pharmaceutical, food handling, laboratory work, electronic, intricate parts handling, and maintenance and cleanup.



Part Number	Size	Packaging	Total/Case
VTGNPFB95-XS	XS	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB95-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB95-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB95-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB95-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case

### Nitrile Powder-Free 12" Glove PDF

- 100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)
- Accelerator & sulfur free
- Contains no fillers, silicones or plasticizers
- 12"/290 mm length with beaded long cuff
- Textured fingertips
- Powder-free, double chlorination, filtered water rinse
- ESD compliant and acid and solvent compatible

This cleanroom packaged glove is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is also commonly used in a wide variety of applications, including semiconductor, pharmaceutical, food handling, laboratory work, electronic, intricate parts handling, and maintenance and cleanup.





Part Number	Size	Packaging	Total/Case
VTGNPFB12-XS	XS	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB12-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB12-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB12-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB12-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case
VTGNPFB12-2X	2X	100 ea/bag, 10 bags/case	1000 ea/case

Nitrile Glove



\_ATEX FREE

#### Multi-Task 'Arizona Blue' Nitrile Glove (PDF)

- 100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)
- Accelerator & sulfur free
- Cleanroom compatible packaging for proper donning
- 9"/230 mm length with beaded cuff
- Textured fingertips
- Powder-free, single chlorination
- ESD compliant

This cleanroom packaged glove is recommended for use in a cleanroom Class 10.000+ (ISO7+) critical environment. It is also recommended for non-sterile Life Science applications (Medical device and Pharmaceutical), as well as general purpose, non-critical applications. It is also suitable as a donning glove.

Part Number	Size	Packaging	Total/Case
VTGNMTPFB90AB-XS	XS	100 ea/bag, 10 bags/case	1000 ea/case
VTGNMTPFB90AB-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGNMTPFB90AB-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGNMTPFB90AB-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGNMTPFB90AB-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case
VTGNMTPFB90AB-2X	2X	100 ea/bag, 10 bags/case	1000 ea/case

#### Ultra Thin Nitrile Powder-Free 9.5" Glove (PDF)

- 100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)
- Accelerator & sulfur free
- Contains no fillers, silicones or plasticizers
- 9.5"/240mm length with beaded standard cuff
- Textured fingertips
- Powder-free, double chlorination, filtered water wash
- ESD compliant and acid and solvent compatible

This cleanroom packaged glove is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is also commonly used in a wide variety of applications, including semiconductor, pharmaceutical, food handling, laboratory work, electronic, intricate parts handling, and maintenance and cleanup.

Part Number	Size	Packaging	Total/Case
VTGNUTPFB95-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGNUTPFB95-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGNUTPFB95-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGNUTPFB95-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case









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LATEX FREE

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### Nitrile Cleanroom 12" Glove PDF

- 100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)
- Accelerator & sulfur free
- 12"/290 mm length with beaded long cuff
- Textured fingertips
- Powder-free, double chlorination, 18 mega ohms D.I. water rinse
- Low levels of particles and extractable counts
- ESD compliant and acid and solvent compatible

This cleanroom packaged glove is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is also recommended for use in a wide variety of applications that require an extremely clean glove such as wafer fabrication, disk drives, semiconductor, biotechnology, non-aseptic pharmaceutical and optics.





Part Number	Size	Packaging	Total/Case
VTGNCRB12-XS	XS	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRB12-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRB12-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRB12-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRB12-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case
VTGNCRB12-2X	2X	100 ea/bag, 10 bags/case	1000 ea/case



### PVC Powder-Free Cleanroom 12" Glove PDF

- Polyvinyl chloride plastic material
- 12"/290mm length with beaded long cuff
- Ambidextrous shape
- Disposable and light weight
- Light bisque texture
- ESD compliant
- Low levels of particulate and extractable counts

This cleanroom packaged glove is recommended for use in a cleanroom Class 1-10 (ISO 3-4) critical environment. It is also recommended for use in a variety of applications including electronics, pharmaceutical, laboratory and device manufacturing.





Part Number	Size	Packaging	Total/Case
VTGVCRB12-SM	SM	100 ea/bag, 10 bags/case	1000 ea/case
VTGVCRB12-MD	MD	100 ea/bag, 10 bags/case	1000 ea/case
VTGVCRB12-LG	LG	100 ea/bag, 10 bags/case	1000 ea/case
VTGVCRB12-XL	XL	100 ea/bag, 10 bags/case	1000 ea/case

PVC Glove

### Antistatic White Nitrile Finger Cot [PDF]

- 100% clean, synthetic nitrile polymer (Acrylonitrile Butadiene)
- 2.75" length, rolled with beaded edge
- Powder-free, sulphur free and protein free
- Consistent antistatic power, suitable for ESD sensitive components
- Excellent oil, grease and chemical resistance

This finger cot is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is ideal for the handling of Class II ESD sensitive devices (with thresholds above 100V), electronic assembly and medical device manufacturing.

Part Number	Size	Color	Packaging	Total/Case		
VTCNRPF-SM	SM	White	5 gross pieces/bag, 18 bags/case	12960 ea/case	Static Dissipative	
VTCNRPF-MD	MD	White	5 gross pieces/bag, 18 bags/case	12960 ea/case		
VTCNRPF-LG	LG	White	5 gross pieces/bag, 18 bags/case	12960 ea/case		
VTCNRPF-XL	XL	White	5 gross pieces/bag, 14 bags/case	10080 ea/case		

#### **Conductive Black Latex Finger Cot** (PDF)

- 100% natural latex material provides the highest degree of dexterity
- 2.75" length, rolled with beaded edge
- Treated with minimum level of powder
- Consistent antistatic power
- Reduced protein level and low particle counts and extractable

This finger cot is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is also commonly used in a wide variety of applications, including handling circuit board, static sensitive electronic devices, handling ESD components and semiconductor applications.

\*This product contains natural rubber latex which may cause allergic reactions in some individuals.

Part Number	Size	Color	Packaging	Total/Case
VTCLCONPF-SM	SM	Black	5 gross pieces/bag, 18 bags/case	12960 ea/case
VTCLCONPF-MD	MD	Black	5 gross pieces/bag, 18 bags/case	12960 ea/case
VTCLCONPF-LG	LG	Black	5 gross pieces/bag, 18 bags/case	12960 ea/case
VTCLCONPF-XL	XL	Black	5 gross pieces/bag, 14 bags/case	10080 ea/case







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Grounding



### Anti-Skid Polypropylene ESD Shoe Cover PDF

- 100% non-linting, non-woven spunbond polypropylene fabric with stitched seams
- Disposable, lightweight, strong and durable
- Elastic ankle cuffs
- Sprayed latex anti-skid treads on the bottom for safety
- A 19.6" long conductive ribbon stitched on a solid seam to provide ESD grounding

This shoe cover is recommended for use in a cleanroom Class 10,000+ (ISO 7+) critical environment. It is commonly used for protecting against dirt, grime and certain dry particulates in nonhazardous environments and for protecting sensitive devices in the work area.





Part Number	Size	Length	Height	Color	Packaging	Total/Case
VTSHCVASESDLF-L	LG	16"	6"	Blue	100 ea/bag, 3 bags/case	300 ea/case
VTSHCVASESDLF-X	XL	18″	6″	Blue	100 ea/bag, 3 bags/case	300 ea/case



#### Adjustable Fabric Wristband and Cord Set [PDF]

- Polyester with silver-plated nylon thread for conductivity
- 360° contact around the entire wrist ensures maximum grounding
- Polyurethane coil insulation offers excellent coil memory
- 10-millimeters snap with 1-5 pound pressure release
- 160 mega ohm maximum resistance
- 10 feet extended length coil cord with swivel edge in blue color offers 1 mega ohm resistor and over 50,000 flexes

This wristband and cord set is recommended for use in cleanroom Class 100-1000 (ISO 5-6) critical environment. It is also commonly used in a wide variety of applications where ESD is of paramount importance.





Part Number	Length	Packaging	Total/Case
<u>VTWS-10</u>	10 feet	1ea/bag, 50 bags/pack, 5 packs/case	250 ea/case

#### Adjustable Fabric Heel Grounder PDF

- Velcro closure, durable molded resistor, 35mm cup design
- 1 mega ohm molded resistor
- Silver conductive yarn in gray ribbon
- Black elastic, black rubber and blue loop

This heel grounder is recommended for use in a cleanroom Class 100-1,000 (ISO 5-6) critical environment. It is designed for operators that move from station to station, wear on both feet to ensure consistent grounding. It provides protection for operators on the move by offering a ground via proper flooring surface.

Part Number	Style	Packaging	Total/Case	Static
VTHGV-21	Velcro	1ea/bag, 50 bags/pack, 5 packs/case	250 ea/case	Dissipativ

#### ESD Cleanroom Notebook



(PDF)

- Synthetic polymer impregnated paper
- Excellent ink absorption
- IPA resistant low sodium ink printed pages have low fiber and particle generation and ionic contamination

This notebook is commonly used for note taking, recording, data transferring in a cleanroom Class 1 -10 (ISO 3-4) critical environment where ESD safety is of paramount importance. The pages of the notebook are compatible with most inks in writing without smearing, also they are rotating with ability to lay flat which ensures flexibility and ease of use.

Part Number	Size	Style	Packaging	Total/Case
VTNBCRE-8511	8.5″ x 11″	100 pages, side spiral-bound	1 ea/bag, 20 bags/case	20 ea/case









ESD Notebook



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MicroTek

ISO 5-6 (Class 100- 1.000)

# Valutek's Wiper Naming Guide

Valutek's wiper nomenclature follows a very simple and easy understading system, each part number describes the wiper in three consistent charateristics: **Substrate**, **Edge Treatment and Size** respectively.

For example: VTPNWPHS-99

VT	PN	W	PHS	99
Valutek	Polyester Knit	Wiper	Pressure Heat Seal	Size 9" x 9"

### Wiper Naming Reference

Pre-Wetted Naming Reference

VT	Valutek	VT	Valutek
W	Wiper	W	Wiper
SINTR	Spuniace Nonwoven Cellulose-Polyester	SNIK	Spuniace Nonwoven Cellulose-Polyester
PN	Polyester Knit	PN	Polyester Knit
NN	Nylon Knit		
TPC	Twill Patterned Cotton	LS	Laser Seal
MF	Microfiber	US	Ultrasonic Seal
PNU	Polyester Nylon Ultra	PHS	Pressure Heat Seal
PNWESD	Polyester Woven Electro Static Discharge		
2	2-ply	SI70	Saturated 70% IPA
LW	Light Weight	SI90	Saturated90% IPA
LT	Low Texture	R	Refill Bag
		P	Pouch
15	laser Seal	F	Foil Pouch
	Illtrasonic Seal		
	Brossure Heat Seal	1.1	A"xA"
FIIJ	Flessule fleat Seal	44	4 X4
	all all	99	9 X9
44	4" X4"	1212	12"x12"
99	9″x9″		
1212	12"x12"		
1818	18"x18"		
2020	20"x20"		

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# Valutek's Glove Naming Guide

Valutek's glove nomenclature follows a very simple and easy understading system, each part number describes the glove in three consistent characteristics: **Substrate**, **Packaging**, **Cuff Length** respectively.

For example: VTGNCRB12

VT	G	Ν	CRB	12
Valutek	Glove	Nitrile	Cleanroom Bagged	Cuff Length 12"

Glove Naming F	Reference
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VT	Valutek	90	Cuff Length 9"
G	Glove	95	Cuff Length 9.5"
		12	Cuff Length 12"
Ν	Nitrile		
L	Latex	XS	Extra Small
V	PVC	SM	Small
PF	Powder Free	MD	Medium
UT	Ultra thin	LG	Large
MT	Multi-Task	XL	Extra Large
AB	Arizona Blue	2X	XX Large
В	Bagged		
CRB	Cleanroom Bagged		
IR	Irradiated		
	madiated		



Valutek's apparel nomenclature follows a very simple and easy understading system, each part number describes the product in full detail with product type, substrate, style, weight, color and size.

For example: VTSHCVPLHWX-BL

VT	SHCV	PL	HW	Х	BL
Valutek	Shoe Cover	Polyethylene	Heavy Weight	Extra Large	Blue

### Apparel Naming Reference

VT	Valutek	Garment		Shoe Cover
		LBCI	Lab Coat	SHCV Shoe Cover
Headwear		LBCIC	Coated Lab Coat	BICV Boot Cover
BFC	Bouffant Cap	CVRL	Coverall	PP Polyproplyene
MHOOD	Microporous Hood	CVRLC	Coated Coverall	PL Polyethylene
		М	Microporous	PPL Polyethylene coated
W	White	Z	Zipper	polyproplyene
BL	Blue	НВ	Hood and Boot	
HW	Heavy Weight			AS Anti-Skid
U	Universal Size	SM	Small	ESD Electro Static Discharge
21	21"	MD	Medium	LF Long Ribborn
24	24"	LG	Large	V PVC Sole
		XL	Extra Large	LW Light Weight
Facewear		2X	XX Large	HW Heavy Weight
BCV	Beard Cover	3X	XXX Large	
MASK	Mask	4X	XXXX Large	L Large
VEIL	Veil	1		X Extra Large
		Sleeve		
ELR	Ear Loop	SLV	Sleeve	W White
HB	Head Band	SLVC	Coated Sleeve	BL Blue
НW	Heavy Weight	М	Microporous	
\\/	White	18	18"	
RI	Rhuo	21	21″	
DL	Diue	Z 1	21	

## Valutek's Glove Liner Naming Guide

VT GNLR	Valutek Glove Liner	1/2 1/1	Half Finger Full Finger	

## Valutek's Adhesive Mat Naming Guide

VT	Valutek	3660	36″x60″
1836	18"x36"	3672	36"x72"
1845	18"x45"	4P	4 Mat per Case
2436	24"x36"	30L	30 Layers
2645	26"x45"	В	Blue
3636	36"x36"	W	White
3645	36"x45"	G	Grey



# Valutek's Cleaning Product Naming Guide

VT	Valutek	716	7"x16"	
MOP	Mop Head	4516	4.5"x16"	
PNW	Polyester Knit	TRLR	Tacky Roller	
CR	Cleanroom	В	Blue	
F	Flat	W	White	

## Valutek's Documentation Naming Guide

		1		
VT	Valutek	8511	8.5″x11″	
CR	Cleanroom	1117	11"x17"	
NB	Notebook	34	3″x4″	
PS	Papers	В	Blue	
NP	Note Pad	W	White	
E	Electro Static Discharge	G	Green	
23	23lbs	Y	Yellow	
30	30lbs	0	Orange	
35	3″x5″	Р	Pink	
5585	5.5″x8.5″			

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# Valutek's Cleaning Product Naming Guide

VT	Valutek	HGV	Heel Grounder
С	Finger Cot	SM	Small
NR	Nitrile	MD	Medium
L	Latex	LG	Large
CON	Conductive	XL	Extra Large
PF	Powder Free	10	10"
WS	Wristband Set	21	21"

# Reference

## **Technical Organizations**



GSFCC.ORG *Cleanroom Wiki* 





ESD.ORG Test Methods





NEBB.ORG Cleanroom Construction Standards

### Publications



Handbook for Critical Cleaning -Barbara Kanegsberg & Edward Kanegsberg







Cleanroom Consumable Guide Greg Heiland

# Reference

### Trade Associations



premier marketplace for microelectronics manufacturing



the World's Largest Annual Conference and Exposition for Laboratory Science



thought provoking insights from top pharmaceutical executives

### **INTERPHE**

Pharmaceutical and medical manufacturing event



MEMS Industry Group the trade association advacing MEMS and Sensors across global market



the latest on light research and applications from photonics media



national trade association for medical technology









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