



# 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.

- 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	Di

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





MicroTek

ISO 5-6 (Class 100- 1.000)



NanoTek ISO 3-4 (Class 1-10) 3



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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





#### 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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### 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

#### 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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#### 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	Dissipati

#### ESD Cleanroom Notebook

High-density polypropylene cover with an impregnated antistatic property and excellent chemical resistance

(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.













Grounding