



NanoTek  
ISO 3-4 (Class 1-10)

# Valutek Nitrile Cleanroom 12" Glove



Part Number: VTGNCRB12

Valutek's 12" ambidextrous nitrile powder-free cleanroom glove is crafted from 100% clean, synthetic nitrile polymer, with no rubber latex content.

This glove features textured fingertips and a beaded long cuff design, offering the highest level of cleanliness and operator dexterity, while maintaining very low levels of particle and extractable counts.

All Valutek gloves are tested and are manufactured in ISO-compliant facilities, subject to Valutek inspection and stringent process control, ensuring compliance with Valutek quality standards and product specifications.

## Features

- 100% clean and synthetic nitrile polymer (Acrylonitrile Butadiene)
- Accelerator and sulfur free
- 12"/290 mm length with beaded long cuff
- Contains no fillers, silicones, or plasticizers
- Textured fingertips, powder-free, double chlorination and 18 mega-ohm D.I. water rinse
- Low levels of particles and extractable counts
- ESD compliant, acid and solvent compatible

## Application

As part of the Valutek Nanotek product line, this glove is packaged for cleanrooms and recommended for use in a 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.

## Packaging



- Outer bag contains inner bag with 2 stacks of 50 gloves.
- Gloves packaged cuffs on bottom, vacuum sealed, flat packed and with a carton liner.
- 100 ea/bag, 10 bags/case, 1000 ea/case.
- Critical environment compatible.
- All gloves are lot trace-able with retention samples held in Quality Control for 36 months from the date of manufacturing.



Gloves



Wipers



Apparel



Adhesive Mats



Cleaning & Maintenance



Documentation



Glove Liners



ESD



## Valutek Nitrile Cleanroom 12" Glove

Part Number: VTGNCRB12

## VTGNCRB12 Physical Properties

Part Number	Size	Palm Width (mm)	Weight (gm)	Length (inch/mm)	Test Method
VTGNCRB12-XS	XS	75 ± 5	5.5 ± 0.2		
VTGNCRB12-SM	SM	85 ± 5	6.0 ± 0.2		IEST-RP-CC005.4
VTGNCRB12-MD	MD	95 ± 5	6.5 ± 0.2	12"/290	ASTM D3767
VTGNCRB12-LG	LG	105 ± 5	7.0 ± 0.2		
VTGNCRB12-XL	XL	115 ± 5	7.5 ± 0.2		
VTGNCRB12-2X	2X	125 ± 5	8.0 ± 0.2		

Tensile Properties				Measured Points		
Tensile Strength	Ultimate Elongation	Test Method	Thickness	Test Method		
Before Aging	18 MPa, min	500%, min	Fingertip	5.11 mil 0.13 mm, min	ASTM D6319	
After Aging	16 MPa, min	450%, min	Palm	3.94 mil 0.10 mm, min		
			Cuff	3.15 mil 0.08 mm, min		

\*Barrier Integrity: AQL 1.5

## VTGNCRB12 Technical Performance

Attribute	Value	Units	Test Method
Particle Counts			
LPC: ≥0.5 μm	<600	particles/cm <sup>2</sup>	IEST-RP-CC005.4, Sec 16.4
Non Volatile Residue (NVR)			
DI Water	<2.0	μg/cm <sup>2</sup>	IEST-RP-CC005.4, Sec 17.2
IPA	<5.0	μg/cm <sup>2</sup>	IEST-RP-CC005.4, Sec 17.2
FTIR			
Silicone Oil, Amide, DOP	Not Detected		IEST-RP-CC005.4, Sec 17.4
Endotoxin Level			
Endotoxin Level:	≤ 20	EU/Glove	LAL Kinetic Turbidimetric, USP <85>
	≤ 0.5	EU/ml	
Extractable Counts (Ions)			
Sodium(Na)	<0.02 μg/cm <sup>2</sup>	Fluoride(F <sup>-</sup> )	<0.001 μg/cm <sup>2</sup>
Potassium(K)	<0.02 μg/cm <sup>2</sup>	Bromide(Br <sup>-</sup> )	<0.001 μg/cm <sup>2</sup>
Calcium(Ca)	<0.30 μg/cm <sup>2</sup>	Phosphate(PO <sub>4</sub> <sup>3-</sup> )	<0.002 μg/cm <sup>2</sup>
Magnesium(Mg)	<0.005 μg/cm <sup>2</sup>	Chloride(Cl <sup>-</sup> )	<0.20 μg/cm <sup>2</sup>
Ammonium(NH <sub>4</sub> <sup>+</sup> )	<0.005 μg/cm <sup>2</sup>	Sulfate(SO <sub>4</sub> <sup>2-</sup> )	<0.06 μg/cm <sup>2</sup>
Nitrate(NO <sub>3</sub> <sup>-</sup> )	<0.12 μg/cm <sup>2</sup>	Nitrite(NO <sub>2</sub> <sup>-</sup> )	<0.001 μg/cm <sup>2</sup>
Lithium(Li)	<0.005 μg/cm <sup>2</sup>	Aluminium(Al)	<0.01 μg/cm <sup>2</sup>
Zinc(Zn)	<0.07 μg/cm <sup>2</sup>	Iron(Fe)	<0.005 μg/cm <sup>2</sup>
Copper(Cu)	<0.0004 μg/cm <sup>2</sup>		

ESD Properties	Value	Units	Test Method
Surface Resistivity	< 1 X 10 <sup>11</sup>	Ohm	ANSI/ESD SP15.1
Electrostatic Decay	< 5.0	Sec	FTMS 101-C,4046
Tribo Charge	< 50	V	In -house method

\*Note: Technical data listed reflects upper/lower manufacturing specification limits. Certificates of Analysis available upon request for actual lot-to-lot test data. 36 month lot trend analysis available upon request.

