# 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 megaohm D.I. water rinse
- Low levels of particles and extractable counts
- ESD compliant, acid and solvent compatible

### **Application**

As a member of the **Valutek Nanotek product family**, 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-asceptic 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.

















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Documentation

www.valutek.com

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### **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	$6.0 \pm 0.2$		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	$8.0 \pm 0.2$		

Tensile Properties	Tensile Strength	Ultimate Elongation	Test Method
Before Aging	18 MPa, min	500%, min	
After Aging	16 MPa, min	450%, min	ASTM D412
Arter Aging	10 WI G, 11III	400%, 111111	

<sup>\*</sup>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/cm²	IEST-RP-CC005.4, Sec 17.2
IPA	<5.0	μg/cm²	IEST-RP-CC005.4, Sec 17.2
FTIR			
Silicone Oil, Amide, DOP	Not Detectable		IEST-RP-CC005.4, Sec 17.4
Extractable Counts (lons)			
Sodium(Na)	<0.02 µg/cm²	Fluoride(F-) <0.001 µg/cm²	
Potassium(K)	<0.02 µg/cm²	Bromide(Br <sup>-</sup> ) <0.001 µg/cm <sup>2</sup>	
Calcium(Ca)	<0.30 µg/cm²	Phosphate(PO4 <sup>3-</sup> ) <0.002 µg/cm <sup>2</sup>	
Magnesium(Mg)	<0.005 µg/cm²	Chloride(Cl⁻) <0.20 µg/cm²	
Ammonium(NH4 <sup>+</sup> )	<0.005 µg/cm²	Sulfate(SO $_4^{2-}$ ) <0.06 µg/cm <sup>2</sup>	IEST-RP-CC005.4, Sec 17
Nitrate(NO3-)	<0.12 µg/cm²	Nitrite(NO2 <sup>-</sup> ) <0.001 µg/cm²	
Lithium(Li)	<0.005 µg/cm²	Aluminium(Al) <0.01 µg/cm²	
Zinc(Zn)	<0.07 μg/cm²	Iron(Fe) <0.005 μg/cm²	
Copper(Cu)	<0.0004 µg/cm²		
Endotoxin Level			
Limit: Max 20 EU/Glove			
Limit of Reporting (LOR) = 0.2 EU/Glove	<0.2	EU/Glove	LAL Kinetic Tubidimetric, USP <85>
ESD Properties			
Electrostatic Decay	<5 seconds	Tribo Charge <50 V	ANSI/ESD SP15.1
Surface Resistivity	<1 X 10Ε11 Ω <sup>-2</sup>	mbo charge 100 v	ANSI/ESD SI IS.I

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

