

SmartClean™



The Cleanroom Gloves Specialist
Electrostatic Dissipative (ESD)

SMART GLOVE™

SmartClean™ Cleanroom Glove



- Featuring soft and stretchy technology designed for excellent dexterity, tactility and durability for best performance
- Provides extra comfort fit to the users when carrying out tasks over long hours and reducing hand fatigue
- Exceptionally low levels of particles, ionic extractable and non-volatile residue (NVR), suitable for cleanroom compatible processes
- Offers superior electrostatic dissipative (ESD) properties (antistatic) enabling vital protection to sensitive applications
- Packed in a cleanroom environment using double bagged packaging, increasing control over potential contamination

Our Cleanroom Gloves are suitable for use in the following industries:-

- Semiconductor
- Healthcare
- Optics and Biotechnology
- Manufacturing industries that require a clean and controlled environment
- Hard Disk Drive
- Aerospace
- Pharmaceutical
- Microelectronic
- Laboratory

Product Information

Material	Nitrile
Usage	Single use
Thickness by finger	6-7mil, 4-5mil, 4mil, 3.5mil
Clean environment	Class 10 Class 100 Class 1000
Finishing	Tacky, Non-Tacky
Glove Type	Ambidextrous (Finger Textured, Full Textured) Hand Specific (Micro Textured)
Cuff	Beaded
Length	290mm, 300mm, 330mm
Colour	Opaque White, Translucent

Packaging Detail

AMBIDEXTROUS			HAND SPECIFIC	
SIZE	PALM WIDTH (mm)	PACKAGING	SIZE	PACKAGING
XXS	60-72	Double polybag vacuum seal packed 100 gloves per double polybag 10 polybags per case	5 ½	1 pair per pouch 10/20 pouches per polybag 10/20 polybags per case
XS	70-82		6	
S	80-92		6 ½	
M	90-102		7	
L	100-112		7 ½	
XL	110-122		8	
XXL	120-132		8 ½	
			9	



Physical Properties Information

		SPECIFICATION			TYPICAL VALUE		
		Class 10	Class 100	Class 1000	Class 10	Class 100	Class 1000
Tensile strength	Before & After aging	Min 14MPa			16 – 35MPa		
Ultimate elongation (elasticity)	Before aging	Min 500%			600% – 720%		
	After aging	Min 400%			550% – 680%		

Properties Information

Fourier Transform Infrared Spectroscopy (FTIR)	No silicone, amide and Dioctyl phthalate (DOP) detected (Tested in accordance with IES – RP – CC – 005.2)				
Triboelectric charge test, voltage	≤ 20 V				
Time Decay (1000V-100V) Electrostatic Dissipative (ESD)	Less than 3.0 sec (Tested in accordance with FTMs No. 101 [Method 406])				
Surface Resistivity (SR)	$10^8 - 10^{11} \Omega / sq.$ (Tested in accordance with ASTM D257-93)				
Non-volatile residue (NVR)	Max 30mg/g				
Thickness Single wall (mm)		SPECIFICATION	TYPICAL VALUE		
			3.5mil	4-5mil	6-7mil
	Finger (at 13±3mm from fingertip)	Min 0.09	0.09 ± 0.02	0.11 ± 0.02	0.17 ± 0.02
	Palm (at center of palm)	Min 0.06	0.06 ± 0.02	0.08 ± 0.02	0.13 ± 0.02
	Cuff (at 25±5mm from cuff edge)	Min 0.05	0.05 ± 0.02	0.07 ± 0.02	0.11 ± 0.02
Certificate of Conformance	A Certificate of Release is available upon request to ensure all products shipped conform to specified specification				
Quality Assurance	Meet or exceed ASTM D6319 on water leak & dimension Manufactured under GMP, ISO 9001, ISO 13485 and CMDCAS Quality System				





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 GLOVES SPECIALIST

Cleanliness Specifications

		SPECIFICATION			
		Class 10		Class 100	Class 1000
Particle (counts / cm² @ ≥ 0.5µm)		<300	<800	<1500	<3500
Ionic extractable Less than (µg /cm²)	Ammonium (NH ₄ ⁺)	0.001	0.050	0.100	0.150
	Calcium (Ca ²⁺)	0.150	0.200	0.300	1.000
	Lithium (Li ⁺)	0.001	0.001	0.001	0.050
	Magnesium (Mg ²⁺)	0.001	0.010	0.100	0.150
	Potassium (K ⁺)	0.020	0.050	0.100	0.150
	Sodium (Na ⁺)	0.020	0.050	0.100	0.150
	Bromide (Br ⁻)	0.001	0.001	0.001	0.050
	Chloride (Cl ⁻)	0.100	0.100	0.200	0.350
	Fluoride (F ⁻)	0.001	0.001	0.001	0.050
	Nitrate (NO ₃ ⁻)	0.050	0.050	0.100	0.250
	Nitrite (NO ₂ ⁻)	0.001	0.001	0.001	0.050
	Phosphate (PO ₄ ³⁻)	0.001	0.001	0.001	0.050
Sulfate (SO ₄ ²⁻)	0.050	0.050	0.100	0.500	

(Tested in accordance with IEST - RP -CC - 005.4)



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