

# PRODUCT SPECIFICATION

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**HandPRO<sup>3</sup>**  
PRECISION PROTECTION PERFORMANCE

**SERIES 4511** **TRIPLE BAGGED**

## STERILE HAND-SPECIFIC LATEX GLOVES

300mm (12") Length

Premium Natural  
Rubber Latex

Low Protein

Sterile

Powder-Free

Natural Color

Textured Surface

Double-Donnable

Hand-Specific

Beaded Long Cuff



ISO 374-1/Type B



KPT

ISO 374-5:2016



Virus



## QUALITY & CONFORMITY

- Manufactured in an ISO 13485:2016 and ISO 9001:2015 certified facility
- Category III PPE according to PPE Regulation (EU) 2016/425
- Glove Standard EN ISO 21420:2020, EN ISO 374-1:2016+A1:2018, EN ISO 374-2:2019, EN ISO 374-4:2019, EN 16523-1:2015+A1:2018
- Conforms to the following additional test standards:

IEST-RP-CC005.4	Recommended Practice for Cleanroom Gloves
ASTM D412	Tensile Properties of Vulcanized Rubbers
ASTM D3578	Standard Specification for Rubber Examination Gloves
ASTM D5151-99	Standard Test for Detection of Holes in Medical Gloves
ASTM D573	Accelerated Aging for Rubber (at 70° C for 166hr)
ASTM D5712	Test Method for Aqueous Extractable Protein
ASTM D6124	Test Method for Residual Powder on Medical Gloves

## PHYSICAL DIMENSIONS

Size	5-1/2	6	6-1/2	7	7-1/2	8	8-1/2	9
Palm Width (± 4-6 mm)	72	77	83	89	95	102	108	114
Glove Length (mm)	Minimum 290							
Thickness (mm)	<b>Internal Control</b>				<b>Typical Values</b>			
Cuff	Min. 0.17				0.17			
Palm	0.20 ± 0.02				0.20			
Finger	0.23 ± 0.02				0.22			

## PHYSICAL PROPERTIES

Test	Before Aging		After Aging	
	Manufacturing Minimum	Typical Value	Manufacturing Minimum	Typical Value
Tensile Strength (MPa)	24	28	18	24
Ultimate Elongation	750%	830%	560%	612%
Force at Break (N)	≥9	16	≥9	14

## CLEANLINESS SPECIFICATION

Particulates (≥0.5 µm)	<3000 particles/cm <sup>2</sup>
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## CHEMICAL RESISTANCE

Chemical	Performance Level	Mean Degradation / %
70% Isopropanol	0	4.7
Diethylamine (G)	0	37.3
40% Sodium Hydroxide (K)	6	-0.9
96% Sulphuric Acid (L)	1	75.7
25% Ammonium Hydroxide (O)	0	-95.7
13% Sodium Hypochlorite (with 14% active chlorine)	6	-8.2
37% Formaldehyde (T)	6	-11.3
50% Glutaraldehyde	4	-166.4
5% Ethidium Bromide	6	-34.1
30% Hydrogen Peroxide	6	13.4

\* with measured breakthrough time of minimum 480 minutes for level 6, minimum 120 minutes for level 4, and minimum 10 minutes for level 1

The specifications provided reflect the minimum acceptable requirements of the ASTM and FDA where applicable. Actual testing results are available upon request. Gloves offered by Hourglass International, Inc. meet or exceed these physical requirements. Independent laboratory test results are available upon request.

Your Protection Is  
Our Purpose



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## STERILIZATION

Sterilized by Gamma Irradiation in accordance with ISO 11137-1:2006.

## PERFORMANCE REQUIREMENTS

Characteristic	Inspection Level	AQL
Freedom from Holes	G1	1.5
Visual Defects (Major)	G1	2.5
Visual Defects (Minor)	G1	4.0
Physical Properties	S2	4.0
Physical Dimensions	S2	4.0
Extractable Protein	-	50 µg/gm (max)
Powder Residue	-	2mg/glove (Max)

## PRODUCT NUMBERS

Size	Item #	Case Quantity
5-1/2	4511-55	200 Pair
6	4511-60	200 Pair
6-1/2	4511-65	200 Pair
7	4511-70	200 Pair
7-1/2	4511-75	200 Pair
8	4511-80	200 Pair
8-1/2	4511-85	200 Pair
9	4511-90	200 Pair

## PACKAGING

Packaged in an ISO 5 Clean Class Environment

1) 1 pair 12" sterile gloves per poly thermoform pouch, 2) 50 poly pouches per inner poly bag, 3) 4 inner poly bags per master poly case lining bag (200 pair/case.)

## SHELF LIFE & STORAGE

Three years from date of manufacture. Store in a cool, dry place away from direct sunlight.

Manufactured in Malaysia for Hourglass International, Inc.

The information on this document is a guideline of typical values and characteristics of the product.