

Cardinal Health™

Protexis® Surgical Gloves





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Protecting the hands that heal.



You give everything to your patients, it's who you are. Just as it's in your instinct to provide care, it's ours to ensure your safety every step of the way. To protect you and your hands that heal.

That's why we build quality, clinical best practice, and trust directly into every Protexis® glove, to provide you with the **Perfect Fit** for every type of procedure.







Clinical best practice



Trust

Are you ready to find your Perfect Fit?









The Protexis® Perfect Fit







Quality

You shouldn't have to sacrifice quality for a comfortable fit and feel. That's why for more than five decades we've been committed to crafting proprietary molds and formulations that mimic the actual anatomy and physiology of your hands and owning the entire manufacturing and supply chain process to ensure the highest quality standards are adhered to at every step.



"The gloves fit well and are comfortable."

RN, Top 3 *US News & World Report* Hospital²



#1

Surgical gloves in the US¹



2,000

quality variables monitored



AQL of 0.65 exceeding industry standards



ISO, EN, ASTM and PPE standards met globally

- 1. GHX Units, All Channels, 2017.
- 2. Techvalidate Research Study, December 2017.



2. T. J. J. J. S. J. G. J. G.

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The Protexis® Perfect Fit







Clinical best practice

The Perfect Fit is a commitment to provide your team with the most clinically recommended product options that meet their unique needs, as well as the ongoing education and tools to maximize their safety in the OR.



"Education and consistency during our conversion of all gloves with Cardinal Health helped to garner staff and physician buy-in."

Executive Director, 70+ facility health system¹





CE courses, podcasts, webinars and videos

Clinically-authored white papers and journals

Posters, fact sheets and interactive tools

Sampling, sizing and product evaluation support

TOPICS INCLUDE:

Latex safety

Double-gloving

Dermatitis prevention

Hand wellness



1. Techvalidate Research Study, December 2017.

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The Protexis® Perfect Fit



QUALITY



CLINICAL BEST PRACTICE



TRUST



Trust

The Perfect Fit is a commitment to providing support throughout the conversion process to reduce the burden of change for your entire team. As the surgical gloves supplier to 90% of the organizations recognized in the *U.S. News and World Report* Best Hospitals Honor Roll², we have developed best-in-class conversion processes to help you improve safety and efficiency, while reducing inventory and costs through standardization.

In fact, **79%** of our customers actually saved money when they went latex-free with Protexis® Surgical Gloves.³

- 1. GHX Units, All Channels, 2017.
- 2. U.S News & World Report, data valid as of September 2017. https://www.usnews.com/info/blogs/press-room/articles/2017-08-08/us-news-announces-2017-18-best-hospitals.
- 3. Techvalidate Research Study, December 2017.

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"The Cardinal Health team made the conversion seamless."

VP of Perioperative Services, Large Academic Teaching Institution¹





NON-LATEX POLYISOPRENE

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- Designed to be comfortable and reliable for any type of surgical procedure
- Synthetic, not made with natural rubber latex

Catalanna	c:	Longeth		Thickness ¹		Material	Color	Cuff	Qty/	Qty/	
Catalog no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	bx	cs	
2D72PT55X	5.5										
2D72PT60X	6	11.3 in./ 287mm									
2D72PT65X	6.5	20/111111									
2D72PT70X	7		9.1 mil/	9.8 mil/	6.7 mil/	Synthetic		Beaded/		200	
2D72PT75X	7.5	11.8 in./ 300mm		0.23mm	0.25mm	0.17mm	polyisoprene (PI)	Cream	Rolled	50	200
2D72PT80X	8										
2D72PT85X	8.5	30011111									
2D72PT90X	9	1									



See Appendix page 29 for complete testing standards



Protexis® Surgical

See Appendix page 28 for chemotherapy agent permeation results







Protexis® Pl with Neu-Thera®

- Designed to be comfortable and reliable for any type of surgical procedure
- Same great engineering as our Protexis® PI with our patented Neu-Thera® coating
- Synthetic, not made with natural rubber latex

What is Neu-Thera®?1

Neu-Thera® is a moisturizing coating that we place on the inside of Protexis® PI with Neu-Thera®. It **promotes overall skin wellness and supports hand health** by providing relief of dry, flaky skin and minimizing skin shedding.

Catalog	C:	Lanath		Thickness ²		Material	Color	Cuff	Qty/	Qty/
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	bx	CS
2D73TE55	5.5									
2D73TE60	6	11.3 in./ 287mm								
2D73TE65	6.5	207111111				Synthetic polyisoprene				
2D73TE70	7		9.1 mil/	9.8 mil/	6.7 mil/	(PI) with		Beaded/	F0	200
2D73TE75	7.5		0.23mm	0.25mm	0.17mm	Neu-Thera®		Rolled	50	200
2D73TE80	8	11.8 in./ 300mm				Emollient Coating	Cream			
2D73TE85	8.5	30011111								
2D73TE90	9									





^{2.} Thickness tested in accordance with ASTM D 3577 cardinalhealth.com/protexis







Protexis® Pl Classic

- Designed to be comfortable and reliable for any type of surgical procedure
- Thicker than Protexis® PI Surgical Gloves
- Synthetic, not made with natural rubber latex

Catalanna	c:			Thickness ¹		Matavial	Calan	Cuff	Qty/	Qty/
Catalog no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	bx	CS
2D72PL55X	5.5									
2D72PL60X	6	11.5 in./ 292mm								
2D72PL65X	6.5	272111111								
2D72PL70X	7		11.2 mil/	8.3 mil/	7.1 mil/	Synthetic		Beaded/		200
2D72PL75X	7.5		0.28mm	0.21mm	0.18mm	polyisoprene (PI)		Rolled	50	200
2D72PL80X	8	12 in./ 305mm					Cream			
2D72PL85X	8.5	30311111								
2D72PL90X	9								3	en se









- Ideal underglove when double-gloving
- Distinct blue color aids in alerting wearers to perforations in the outer glove
- Synthetic, not made with natural rubber latex

™ What is Neu-Thera®?¹

Neu-Thera® is a moisturizing coating/emollient that is placed on the inside of Protexis® PI Blue with Neu-Thera®. It **promotes overall skin wellness and supports hand health** by providing relief of dry, flaky skin and minimizing skin shedding.

Catalog	c:	I am mala		Thickness ²		Madavial	Calan	Cuff	Qty/	Qty/
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	bx	cs
2D73EB55	5.5									
2D73EB60	6	11.3 in./ 287mm								
2D73EB65	6.5	20711111				Synthetic polyisoprene				
2D73EB70	7		7.9 mil/	5.5 mil/	5.5 mil/	(PI) with		Beaded/	F0	200
2D73EB75	7.5		0.20mm	0.14mm	0.14mm	Neu-Thera®		Rolled	50	200
2D73EB80	8	11.8 in./ 300mm				Emollient Coating	Blue			
2D73EB85	8.5	30011111								
2D73EB90	9									5



See Appendix page 29 for complete testing standards



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^{1.} Data on file

^{2.} Thickness tested in accordance with ASTM D 3577





Protexis® Pl Micro

- Stretches and conforms to your hand contour, staying comfortably in place
- Ideal in a thin double-gloving system where fingertip sensation is essential
- Heightened tactile response with a comfortable, smooth, anti-slip finish
- Synthetic, not made with natural rubber latex

Catalog	c:	Louish		Thickness ¹		Metaviel	Calan	Cuff	Qty/	Qty/		
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	bx	CS		
2D73PM55	5.5											
2D73PM60	6	11.3 in./ 287mm										
2D73PM65	6.5	20711111										
2D73PM70	7		7.9 mil/	5.5 mil/	5.5 mil/	Synthetic		Beaded/	50	200		
2D73PM75	7.5		0.20mm	0.14mm	0.14mm	polyisoprene (PI)		Rolled	50	200		
2D73PM80	8	11.8 in./		11.8 in./ 300mm					Cream			
2D73PM85	8.5	300111111										
2D73PM90	9											













- Thickest glove in the synthetic portfolio
- Smooth finish for tactile sensitivity
- Water-based hydrogel coating for easy donnability
- Durable for broaching and tactile for pinning
- Rich brown color reduces glare from surgical lighting
- Synthetic, not made with natural rubber latex

Catalanna	C:	Length		Thickness ¹ Material Color		Calan	C	Qty/	Qty/	
Catalog no.	Size	Length	Finger	Palm	Cuff	Materiai	Color	Cuff type	bx	cs
2D73HT60	6	11.5 in./								
2D73HT65	6.5	291mm				Synthetic				
2D73HT70	7					polyisoprene (PI) with				
2D73HT75	7.5		13.4 mil/ 0.34mm	10.2 mil/ 0.26mm	8.3 mil/ 0.21mm	water-based		Beaded/ Rolled	40	160
2D73HT80	8	12.0 in./ 305mm	0.5 111111	0.2011111	0.2111111	hydrogel polymer	Brown	Honed		
2D73HT85	8.5					coating	Diowii			4
2D73HT90	9									









Protexis® Neoprene

- Thinner and softer for enhanced tactile response¹
- Synthetic, not made with natural rubber latex

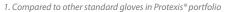
Catalog	c:	1 - 11 114h		Thickness ²		Madawial	Calan	Cuff
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type
2D73DP55	5.5							
2D73DP60	6	11.1 in./ 282mm						
2D73DP65	6.5	20211111				Synthetic		
2D73DP70	7		6.7 mil/	5.5 mil/	5.5 mil/	neoprene with		Beaded/
2D73DP75	7.5		0.17mm	0.14mm	0.14mm	nitrile	Liabt	Rolled
2D73DP80	8	11.7 in./ 297mm				polymer coating	Light brown	
2D73DP85	8.5							
2D73DP90	9							



 $See \, Appendix \, page \, 29 \, for \, complete \, testing \, standards$



See Appendix page 28 for chemotherapy agent permeation results



^{2.} Thickness tested in accordance with ASTM D 3577

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50

200





Protexis® Neoprene Essential

- Manufactured without traditional chemical accelerators that have been known to cause skin sensitivities
- Smooth finish for tactile sensitivity
- Nitrile coating for strength, protection and easy donnability
- Utilizes a specific formulation of zinc oxide during the curing process as an alternative to the four classes of chemical accelerators that are known to lead to type IV allergies.¹
- Synthetic, not made with natural rubber latex

Catalanna	c:	l an ash		Thickness ²	2	Madavial	Calan	C. H. L.	Qty/	Qty/			
Catalog no.	Size	Length	Finger	Palm	Cuff	Material	Color	Cuff type	50	cs			
2D73DS55	5.5												
2D73DS60	6	11.1 in./ 282mm											
2D73DS65	6.5	202111111				Synthetic							
2D73DS70	7		6.7 mil/	6.7 mil/	6.7 mil/	6.7 mil/	≥ 5.5mil/	≥ 5.5mil/	neoprene		Beaded/	F0	200
2D73DS75	7.5		0.17mm	≥ 0.14mm	≥ 0.14 mm	with nitrile polymer	1:	Rolled	50	200			
2D73DS80	8	11.7 in./ 297mm				coating	Light brown			4			
2D73DS85	8.5									- A			
2D73DS90	9]						1200	See and the second	_4			



See Appendix page 29 for complete testing standards



Not made with traditional chemical accelerators



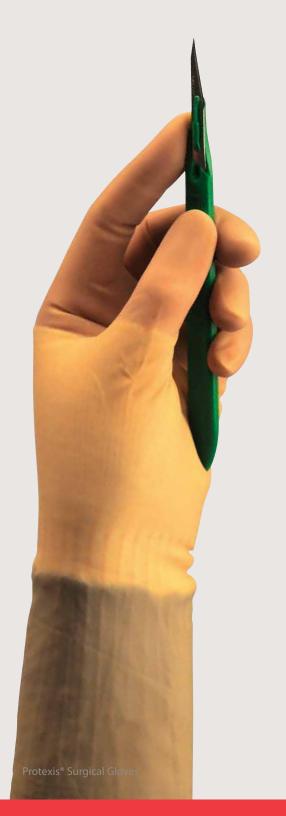
See Appendix page 28 for chemotherapy agent permeation results



^{2.} Thickness tested in accordance with ASTM D 3577









Protexis[®] Latex

- Versatile glove to be used in a wide variety of surgical environments
- Brown tint blends with the wearer's skin for protection that is unobtrusive and less noticeable

Catalog no.	c:	Lamosth		Thickness	1	Matavial	Calan	Cuff	Protein	Qty/	Qty/
Catalog no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	content ²	bx	CS
2D72NS55X	5.5										
2D72NS60X	6	11.1 in./ 282mm									
2D72NS65X	6.5	20211111				Natural rubber			Less than		
2D72NS70X	7		9.8 mil/	7.9 mil/	7.5 mil/	latex with		Beaded/	50	50	200
2D72NS75X	7.5		0.25mm	0.20mm	0.19mm	nitrile	Liadat	Rolled	micrograms/	50	200
2D72NS80X	8	11.6 in./ 295mm				polymer coating	Light Brown		gram		
2D72NS85X	8.5										
2D72NS90X	9									-	



See Appendix page 29 for complete testing standards





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Protexis[®] Latex with Neu-Thera[®]

- Designed to be comfortable and reliable for any type of surgical procedure
- Same great engineering as our Protexis® Latex with our patented Neu-Thera® coating

(b) What is Neu-Thera®?¹

Neu-Thera® is a moisturizing coating/emollient that is placed on the inside of Protexis® Latex with Neu-Thera®. It **promotes overall skin wellness and supports hand health** by providing relief of dry, flaky skin and minimizing skin shedding.

Catalog Size L	Thickness ² Length			Material	Color	Cuff	Protein	Qty/	Qty/					
no.	Size	Length	Finger	Palm	Palm Cuff	Material	Color	type	content ³	bx	cs			
2D73TP55	5.5													
2D73TP60	6	11.1 in./ 282mm				Natural rubber								
2D73TP65	6.5	202111111				latex with			Less than					
2D73TP70	7		9.3 mil/	7.9 mil/	7.5 mil/	nitrile		Beaded/	50	50	200			
2D73TP75	7.5		0.24mm	0.20mm	0.19mm	polymer and	1:	Rolled	micrograms/	50	200			
2D73TP80	8	11.7 in./ 297mm							Neu-Thera®	Light brown		gram		
2D73TP85	8.5					Emollient Coating				25				
2D73TP90	9									A. A.				



See Appendix page 29 for complete testing standards



^{2.} Thickness tested in accordance with ASTM D 3577

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^{3.} Protein content tested using ASTM D 5712 $\,$





Protexis® Latex Classic

- Designed to protect in a broad range of cases
- Ideal outer glove when double-gloving, or can be worn as a stand-alone glove
- Exceptional protection, dexterity and an advanced grip

Catalog	Size	Longth		Thickness	1	Material	Color	Cuff	Protein	Qty/	Qty/
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	content ²	bx	CS
2D72N55X	5.5										
2D72N60X	6	11.5 in./ 292mm									
2D72N65X	6.5	2,2,11111				Natural rubber			Less than		
2D72N70X	7		9.8 mil/	7.9 mil/	7.5 mil/	latex with		Beaded/	50	50	200
2D72N75X	7.5		0.25mm	0.20mm	0.19mm	nitrile		Rolled	micrograms/	50	200
2D72N80X	8	12 in./ 305mm				polymer coating	Cream		gram		
2D72N85X	8.5	30311111									
2D72N90X	9									-	





^{1.} Thickness tested in accordance with ASTM D 3577

^{2.} Protein content tested using ASTM D 5712





Protexis® Latex Hydrogel

- Balances tactile sensitivity with protection, even when double-gloving
- Water-based hydrogel coating for easy donnability with wet or dry hands and enhances second-skin comfort of latex

Catalog	- Size Length	1	Material	Colon	Cuff	Protein	Qty/				
no.	Size	Length	9.8 mil/ 9.1 mil/ 7.1 m 0.25mm 0.23mm 0.18n	Cuff	Materiai	Color	type	content ²	bx	CS	
2D72LS55	5.5										
2D72LS60	6	11.5 in./ 292mm				Natural rubber					
2D72LS65	6.5	2)2111111				latex			Less than		
2D72LS70	7		9.8 mil/	9.1 mil/	7.1 mil/	coated		Beaded/	50		200
2D72LS75	7.5		0.25mm	0.23mm	0.18mm	with acrylic	Turnelment	Rolled	micrograms/	50	200
2D72LS80	8	12 in./ 305mm				hydrogel	Translucent Yellow		gram		
2D72LS85	8.5	30311111				polymer coating					
2D72LS90	9					Coating					





^{2.} Protein content tested using ASTM D 5712





Protexis® Latex Blue with Neu-Thera®

- Ideal underglove when double-gloving
- Distinct blue color aids in alerting wearers to perforations in the outer glove
- Designed to be comfortable and reliable for any type of surgical procedure

What is Neu-Thera®?1

Neu-Thera® is a moisturizing coating/emollient that is placed on the inside of Protexis® Latex Blue with Neu-Thera®. It **promotes overall skin wellness and supports hand health** by providing relief of dry, flaky skin and minimizing skin shedding.

Catalog	Size	l an with		5.5 mil/ 5.5 mil/	Material	Color	Cuff	Protein	Qty/	Qty/	
no.	Size	Length	Finger	Palm	Cuff	Materiai	Color	type	content ³	bx	cs
2D72LU55	5.5										
2D72LU60	6	11.1 in./ 282mm				Natural rubber					
2D72LU65	6.5	202111111				latex with			Less than		
2D72LU70	7		7.7 mil/	5.5 mil/	5.5 mil/	nitrile		Beaded/	50	50	200
2D72LU75	7.5		0.20mm	0.14mm	0.14mm	polymer and		Rolled	micrograms/	50	200
2D72LU80	8	11.6 in./ 295mm				Neu-Thera®	Blue		gram		((
2D72LU85	8.5	25311111				Emollient Coating					
2D72LU90	9										anntex



See Appendix page 29 for complete testing standards



^{2.} Thickness tested in accordance with ASTM D 3577

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^{3.} Protein content tested using ASTM D 5712





Protexis® Latex Micro

- Stretches and conforms to your hand contour, staying comfortably in place
- Ideal in a thin double-gloving system where fingertip sensation is essential
- 30 percent thinner for enhanced flexibility and tactile sensitivity
- Heightened tactile response with a comfortable, smooth, anti-slip finish

Catalanna	c:	Lamonth		Thickness		Material	Color	Cuff	Protein	Qty/	Qty/
Catalog no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	content ²	bx	CS
2D72NT55X	5.5										
2D72NT60X	6	11.1 in./ 282mm									
2D72NT65X	6.5	202111111				Natural			Less than		
2D72NT70X	7		6.9 mil/	5.5 mil/	5.5 mil/	rubber latex with nitrile		Beaded/	50	50	200
2D72NT75X	7.5		0.18mm	0.14mm	0.14mm	polymer	Limbt	Rolled	micrograms/	50	200
2D72NT80X	8	11.6 in./ 295mm				coating	Light brown		gram		
2D72NT85X	8.5	2,3,1,1,1								4	
2D72NT90X	9								imen	economic di	



See Appendix page 29 for complete testing standards



2. Protein content tested using ASTM D 5712

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Protexis® Latex Ortho

- Thickest glove in the latex portfolio
- Smooth finish for tactile sensitivity
- Water-based hydrogel coating for easy donning
- Durable for broaching and tactile for pinning
- Rich brown color reduces glare from surgical lighting

Catalog	C:	Laureth		Thickness ¹		Material	Color	Cuff	Protein	Qty/	Qty/
no.	Size	Length	Finger	Palm		Material	Color	type	content ²	bx	cs
2D72LT60	6	11.1 in./				Nice					
2D72LT65	6.5	282mm				Natural rubber					
2D72LT70	7					latex with			Less than		
2D72LT75	7.5		13.4 mil/ 0.34mm			water- based		Beaded/ Rolled	50 micrograms/	40	160
2D72LT80	8	11.6 in./ 295mm	0.5	0.2	0.21111111	hydrogel	Brown	Honea	gram		
2D72LT85	8.5					polymer coating	DIOWII				
2D72LT90	9					Coating					





^{1.} Thickness tested in accordance with ASTM D 3577

^{2.} Protein content tested using ASTM D 5712

Environmental stewardship

The *Protexis® Perfect Fit* is a commitment to practicing sustainable manufacturing and packaging practices and reducing our environmental impact in the global supply chain. Our culture of safety and best practice is not lost on the global ecosystem in which we operate.



SUSTAINABLE MANUFACTURING & PACKAGING PRACTICES¹

95% of surgical glove inner wallets are made from recyclable and renewable paper sources

Product shipping boxes utilize at least 80% recycled corrugated cardboard

Up to 40% of water used in Cardinal Health surgical gloves manufacturing is recycled and reused on future production runs

All Cardinal Health™ Protexis® surgical gloves are made **DEHP and PVC-free**

Cardinal Health™ Protexis® was the first surgical gloves manufacturer to launch **sustainable** half-fold packaging





Testing standards and technical data



Non-latex polyisoprene This product is not made with natural rubber latex















PROPERTIES (BEFORE AGING)	Protexis® Pl	Protexis® PI with Neu ⁻ Thera®	Protexis® PI Classic	Protexis [®] PI Blue with Neu ⁻ Thera [®]	Protexis® Pl Micro	Protexis® Pl Orthopaedic		
Tensile strength (min)	17 MPa ¹	17 MPa ¹	17 MPa ¹	17 MPa ¹	17 MPa ¹	17 Mpa¹		
Stress at 500% elongation (modulus) (max)	7.0 MPa ¹	7.0 MPa ¹	7.0 MPa ¹	7.0 MPa ¹	7.0 MPa ¹	7.0 Mpa ¹		
Ultimate elongation (elasticity) (min)	650%¹	650%¹	650%¹	650% ¹	650%¹	650%¹		
Puncture resistance (cuff) (min)	5N ²	5N ³	5N ⁴	5N ⁵	5N³	5N ⁶		
Freedom from holes ⁸	0.65 AQL ¹	0.65 AQL ¹	0.65 AQL ¹	0.65 AQL ¹	0.65 AQL ¹	0.65 AQL ¹		
Sterilization	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation		
Accelerant Zinc diethyldithiocarbamate (ZDEC), Zinc mercaptobenzothiazole (ZMBT), Diphenylguanidine (DPG)								

Non-latex neoprene







PROPERTIES (BEFORE AGING)	Protexis® Neoprene	Protexis® Neoprene Essential
Tensile strength (min)	17 MPa ¹	17 MPa ¹
Stress at 500% elongation (modulus) (max)	7.0 MPa ¹	7.0 MPa ¹
Ultimate elongation (elasticity) (min)	650% ¹	650%¹
Puncture resistance (cuff) (min)	5N ⁶	_
Freedom from holes ⁸	0.65 AQL ¹	0.65 AQL ¹
Sterilization	Gamma radiation	Gamma radiation
Accelerant	ZDBC (Zinc Dibutyldithiocarbamate)	Zinc Oxide (an alternative to traditional chemical accelerators known to lead to type IV allergies)

- 1. In accordance with ASTM D 3577
- 2. Tested in accordance with AS/NZS 4179, average test result =10.75N (before aging)
- 3. Tested in accordance with AS/NZS 4179, average test result = 15.5N (before aging)
- 4. Tested in accordance with AS/NZS 4179, average test result = 10.2N (before aging)
- 5. Tested in accordance with AS/NZS 4179, average test result = 12.5N (before aging)
- 6. Tested in accordance with AS/NZS 4179, average test result = 7N (before aging)
- 7. Tested in accordance with ASTM D 6978-05
- 8. Tested in accordance with ASTM D 5151



















PROPERTIES (BEFORE AGING)	Protexis® Latex	Protexis® Latex with Neu ⁻ Thera®	Protexis® Latex Classic	Protexis® Latex Hydrogel	Protexis® Latex Blue with Neu ⁻ Thera®	Protexis® Latex Micro	Protexis® Latex Ortho
Tensile strength (min)	24 MPa ¹	24 MPa ¹	24 MPa ¹	24 MPa ¹	24 MPa ¹	24 MPa ¹	24 Mpa ¹
Stress at 500% elongation (modulus) (max)	5.5 MPa ¹	7.0 MPa ¹	5.5 MPa ¹	5.5 MPa ¹	5.5 MPa ¹	5.5 MPa ¹	5.5 Mpa¹
Ultimate elongation (elasticity) (min)	750%1	650% ¹	750%¹	750%¹	750%¹	750%¹	750%¹
Puncture resistance (cuff) (min)	5N ²	5N ²	5N ²	5N ²	5N ²	5N ²	5N ²
Freedom from holes	0.65 AQL ¹	0.65 AQL ¹	0.65 AQL ¹	0.65 AQL ¹	0.65 AQL ¹	0.65 AQL ¹	0.65 AQL ¹
Sterilization	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation
Accelerant			ZD	BC (Zinc Dibutyldithio	ocarbamate)		

^{1.} In accordance with ASTM D 3577

^{2.} Tested in accordance with AS/NZS 4179, average test result = 8.4N



Chemotherapy agent permeation testing

Agent	Minimum breakthrough detection time in minutes (0.01 μg/cm²/minute)								
	Protexis [®] Pl	Protexis® Neoprene	Protexis® Neoprene Essential						
Carmustine (BCNU) (3.3mg/mL)	15.26*	31.1*	60.1						
Cisplatin (1.0mg/mL)	> 240	> 240	> 240						
Cyclophosphamide (20mg/mL)	> 240	> 240	> 240						
Doxorubicin Hydrochloride (2.0mg/mL)	> 240	> 240	> 240						
Etoposide (Toposar) (20mg/mL)	> 240	> 240	> 240						
Fluorouracil (50mg/mL)	> 240	> 240	> 240						
Methotrexate (25mg/mL)	> 240	> 240	> 240						
Mitomycin C (0.5mg/ml)	_	_	> 240						
Paclitaxel (Taxol) (6.0mg/mL)	> 240	> 240	> 240						
ThioTEPA (10mg/mL)	16.04*	76.0	110.5						
Vincristine Sulfate (1.0mg/mL)	> 240	> 240	_						
Vincristine (1.0mg/ml)	_	_	> 240						

^{*}CAUTION: Do not use Protexis PI glvoes with Carmustine (3.3mg/mL) or ThioTEPA (10mg/mL) due to average breakthrough times of 15.26 minutes and 16.04 minutes respectively, when tested.

Use caution when Protexis* Neoprene with Carumustine (3.3mg/mL) due to average breakthrough time of 31.1 minutes when tested.



When chemotherapy drugs are present, glove selection should be based on the specific type(s) of chemicals used. Users should review drug labeling or Material Safety Data Sheets for the chemicals being used to determine an adequate level of protection.

These gloves have been tested for resistance to permeation of various chemotherapy drugs per ASTM D 6978, "Standard Practice for Assessment of Resistance of Medical Gloves to Permeation by Chemotherapy Drugs."



Testing standards

GLOBAL QUALITY STANDARDS TESTED FOR AND ADHERED TO (results on file)

ASTM D3577, EN 455-2, ISO 10282	Physical dimension (length, width, palm)
ASTM D3577, EN 455-2, ISO 10282	Physical properties (tensile strength)
ASTM D624	Tear strength testing (T-tear, V-tear)
AS/NZA 4179	Puncture resistant testing
ASTM D5151, EN 455-1, ISO 10282	Freedom from holes (water-tightness)
ASTM D6124, EN ISO 21171	Powder residue for powder-free gloves
ASTM D6124	Powder amount for powdered gloves
ASTM D5712	Aqueous extractable protein content
ASTM D6499	Antigenic protein content
EN 455-3	Leachable protein level, modified Lowry method
ASTM D7102, EN 455-3	Endotoxin
ASTM D7102, EN 455-3 ASTM D7160	Endotoxin Storage stability, accelerated aging
ASTM D7160	Storage stability, accelerated aging
ASTM D7160 ASTM D7161	Storage stability, accelerated aging Storage stability, real-time aging
ASTM D7160 ASTM D7161 ASTM F739, EN 16523	Storage stability, accelerated aging Storage stability, real-time aging Lab chemical permeation
ASTM D7160 ASTM D7161 ASTM F739, EN 16523 ASTM D6978, EN 16523	Storage stability, accelerated aging Storage stability, real-time aging Lab chemical permeation Chemotherapy drug permeation (results on page 28)
ASTM D7160 ASTM D7161 ASTM F739, EN 16523 ASTM D6978, EN 16523 ASTM F1671	Storage stability, accelerated aging Storage stability, real-time aging Lab chemical permeation Chemotherapy drug permeation (results on page 28) Bacteriophage penetration
ASTM D7160 ASTM D7161 ASTM F739, EN 16523 ASTM D6978, EN 16523 ASTM F1671 ISO 10993-10	Storage stability, accelerated aging Storage stability, real-time aging Lab chemical permeation Chemotherapy drug permeation (results on page 28) Bacteriophage penetration Sensitivity testing & primary skin irritation

PPE REQUIRED TESTING (results on file)

EN 420:2003 + A1:2009	General requirements, size, dexterity, pH and extractable protein
EN 388:2016	Protective gloves against mechanical risks
EN ISO 374-1:2016	Performance requirements for chemicals risk
EN 374-2:2014	Resistance to penetration against dangerous chemicals and micro-organisms
EN 16523-1:2015	Materials resistance to permeation by chemicals
EN 374-4:2013	Resistance to degradation by chemicals
EN ISO 374-5:2016	Performance requirements for micro-organisms risk

INTERNAL PROCEDURES (results on file)

- Bone cement permeation
- Low-hydration conductivity
- Residue accelerator test



Protexis® Surgical Gloves cardinalhealth.com/protexis 29

Non-latex polyisoprene



		a.			Thickness*		Material	6.1	c ".		Qty/	Qty/	
	Catalog no.	Size	Length	Finger	Palm	Cuff	Coating in red	Color	Cuff type	Chemical accelerant	bx	CS	
	2D72PT55X	5.5											
	2D72PT60X	6	11.3 in./ 287mm										
<u> </u>	2D72PT65X	6.5	20/111111										
Protexis®	2D72PT70X	7		9.1 mil/	9.8 mil/	6.7 mil/	Synthetic polyisoprene (PI)		Beaded/	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC)	50	200	
ê ê	2D72PT75X	7.5		0.23mm	0.25mm 0.25mm	0.17mm			Rolled	3. Zinc-2-mercaptobenzothiazole (ZMBT)	50	200	
PROTEXIS	2D72PT80X	8	11.8 in./ 300mm					Cream					
PROTEXIS	2D72PT85X	8.5	30011111										
	2D72PT90X	9											
	2D73TE55	5.5	44.2. /							1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC)			
•	2D73TE60	6	11.3 in./ 287mm				Synthetic polyisoprene (PI) with						
Protexis® Pl	2D73TE65	6.5	207111111						Beaded/		50	200	
six ® LT-I	2D73TE70	7		9.1 mil/	9.8 mil/								
Protexis®	2D73TE75	7.5	11.0:/	0.23mm	0.25mm		0.17mm Neu-Thera® Emollient			Rolled	3. Zinc-2-mercaptobenzothiazole (ZMBT)	30	200
PROTEXIS 5%	2D73TE80	8	11.8 in./ 300mm				Coating	Cream					
The House Street	2D73TE85	8.5	30011111										
	2D73TE90	9											
	2D72PL55X	5.5	11 5 : /										
Sic	2D72PL60X	6	11.5 in./ 292mm										
Classic	2D72PL65X	6.5											
<u></u>	2D72PL70X	7		11.2 mil/	8.3 mil/	7.1 mil/	Synthetic polyisoprene		Beaded/	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC)	50	200	
×is	2D72PL75X	7.5	12: /	0.28mm	0.21mm	0.18mm	(PI)		Rolled	3. Zinc-2-mercaptobenzothiazole (ZMBT)	30	200	
Protexis®	2D72PL80X	8	12 in./ 305mm					Cream					
7	2D72PL85X	8.5											
The same of the sa	2D72PL90X	9											

^{*}Thickness tested in accordance with ASTM D 3577



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Non-latex polyisoprene



	Catalogue	Size	Longth		Thickness*		Material	Color	Cuff type	Chemical accelerant	Qty/	Qty/
	Catalog no.	Size	Length	Finger	Palm	Cuff	Coating in red	Color	Cuir type	Chemical accelerant	bx	CS
	2D73EB55	5.5										
<u>u</u> «	2D73EB60	6	11.3 in./ 287mm									
Protexis® PI Blue	2D73EB65	6.5	20/111111				Synthetic polyisoprene					
PADIED A F	2D73EB70	7		7.9 mil/	5.5 mil/	5.5 mil/	' ' '		Beaded/	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC)	50	200
×ix	2D73EB75	7.5	44.0.	0.20mm	0.14mm	0.14mm	Neu-Thera®		Rolled	3. Zinc-2-mercaptobenzothiazole (ZMBT)	30	200
PROTEXIS 9	2D73EB80	8	11.8 in./ 300mm				Emollient Coating	Blue				
The Market of the Control of the Con	2D73EB85	8.5					Couring					
	2D73EB90	9										
	2D73PM55	5.5	11 2 : /									
Micro	2D73PM60	6	11.3 in./ 287mm			5.5 mil/ 0.14mm	nolvisonrene		Beaded/	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC)		
	2D73PM65	6.5										200
<u>-</u>	2D73PM70	7		7.9 mil/ 0.20mm	5.5 mil/ 0.14mm						50	
Protexis	2D73PM75	7.5	11.8 in./				0.14mm Polylsopiche (PI)	' ' '		Rolled	3. Zinc-2-mercaptobenzothiazole (ZMBT)	
PROTEXIS	2D73PM80	8	300mm					Cream				
0	2D73PM85	8.5										
	2D73PM90	9										
	2D73HT60	6	11.5 in./									
<u>a</u> :	2D73HT65	6.5	291mm				Synthetic polyisoprene					
es es	2D73HT70	7		13.4 mil/	10.2 mil/	8.3 mil/	(PI) with		Beaded/	1. 1, 3-Diphenylguanidine (DPG)		
SURGICAL GLOVES	2D73HT75	7.5	12.0 in./	0.34mm	0.26mm	0.21mm	water-based		Rolled	2. Zinc Diethyldithiocarbamate (ZDEC)	40	160
Protexis Pl	2D73HT80	8	305mm		,		hydrogel polymer	Brown		3. Zinc-2-mercaptobenzothiazole (ZMBT)		
7	2D73HT85	8.5					coating		srown			
	2D73HT90	9										

*Thickness tested in accordance with ASTM D 3577



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Non-latex neoprene



	Catalog no.	Size	Length	Thickness*			Material	Color	Cuff type	Chemical accelerant	Qty/	Qty/
	Catalog IIo.			Finger	Palm	Cuff	Coating in red	Coloi	cuii type	Chemical accelerant	bx	CS
Protexis Neoprene	2D73DP55	5.5	11.1 in./ - 282mm		5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Synthetic neoprene with nitrile polymer	Light Brown	Beaded/ Rolled	Zinc Dibutyldithiocarbamate (ZDBC)	50	
	2D73DP60	6										
	2D73DP65	6.5										
	2D73DP70	7		6.7 mil/ 0.17mm								200
	2D73DP75	7.5										200
	2D73DP80	8	11.7 in./ 297mm									
	2D73DP85	8.5	23711111									
	2D73DP90	9										
ene	2D73DS55	5.5	444: /		≥ 5.5mil/ ≥ 0.14mm	≥ 5.5mil/ ≥ 0.14 mm	Synthetic neoprene with nitrile polymer	Light Brown	Beaded/ Rolled	Manufactured with Zinc Oxide, an alternative to traditional chemical accelerators	50	
	2D73DS60	6	11.1 in./ 282mm									
	2D73DS65	6.5	20211111									
Protexis® Neopressial Essential	2D73DS70	7		6.7 mil/								200
	2D73DS75	7.5	44.7.	0.17mm								200
	2D73DS80	8	11.7 in./ 297mm									
	2D73DS85	8.5										
	2D73DS90	9										

*Thickness tested in accordance with ASTM D 3577



Latex



	Catalana	G:	Land	Thickness*			Material	Colon	C-111	Protein	Chemical	Qty/	Qty/
	Catalog no.	Size	Length	Finger	Palm	Cuff	Coating in red	Color	Cuff type	content	accelerant	bx	CS
	2D72NS55X	5.5					Natural rubber latex with nitrile polymer		Beaded/ Rolled		Zinc Dibutyldithio- carbamate (ZDBC)	50	200
alle ×	2D72NS60X	6	11.1 in./ 282mm			7.5 mil/ 0.19mm							
Protexis® Latex	2D72NS65X	6.5		9.8 mil/	7.9 mil/ 0.20mm			Light		Less than 50 micrograms/			
	2D72NS70X	7	11.6 in./ 295mm										
	2D72NS75X	7.5		0.25mm								30	200
	2D72NS80X	8								gram			
0.	2D72NS85X	8.5	293111111					Brown					
	2D72NS90X	9									ı		
	2D73TP55	5.5	11.1 : /	9.3 mil/ 0.24mm	7.9 mil/ 0.20mm		Natural rubber latex with nitrile polymer and Neu-Thera® Emollient Coating	Light Brown	Beaded/ Rolled	Less than 50 micrograms/ gram	Zinc Dibutyldithio- carbamate (ZDBC)		
o° ×	2D73TP60	6	11.1 in./ 282mm			7.5 mil/ 0.19mm							
Protexis Latex with Neu-Thera®	2D73TP65	6.5	11.7 in./										
	2D73TP70	7										50	200
	2D73TP75	7.5											200
	2D73TP80	8	297mm										
	2D73TP85	8.5	257111111										
	2D73TP90	9											
sic	2D72N55X	5.5	11.5 in./	9.8 mil/ 0.25mm	7.9 mil/ 0.20mm	7.5 mil/ 0.19mm	Natural rubber latex with nitrile polymer	Cream	Beaded/ Rolled	Less than 50 micrograms/ gram	Zinc Dibutyldithio- carbamate (ZDBC)	50	200
las	2D72N60X	6	292mm										
Protexis® Latex Classic	2D72N65X	6.5											
NOTE OF THE PROPERTY OF THE PR	2D72N70X	7											
•S	2D72N75X	7.5	12 in./										
PROTEXES:	2D72N80X	8	305mm										
rot	2D72N85X	8.5											
<u> </u>	2D72N90X	9											
Protexis* Latex Hyrdogel	2D72LS55	5.5	11.5 in./					Translucent Yellow					
	2D72LS60 2D72LS65	6.5	292mm				Natural						
	2D72LS65 2D72LS70	7		0.0 - 1/	0.1 11/	71 17	rubber latex			Less than	Zinc Dibutyldithio-		
	2D72LS70 2D72LS75	7.5		9.8 mil/ 0.25mm	9.1 mil/ 0.23mm	7.1 mil/ 0.18mm	with acrylic hydrogel		Beaded/ Rolled	50 micrograms/	carbamate (ZDBC)	50	200
PROTEXIS T	2D72LS75 2D72LS80	8	12 in./	0.25111111	0.23mm				Rolled	gram			
A STATE OF THE STA	2D72LS85	8.5	305mm				polymer						
	2D72LS83 2D72LS90	9	ı										
	ZD/ZL390	9											

^{*}Thickness tested in accordance with ASTM D 3577



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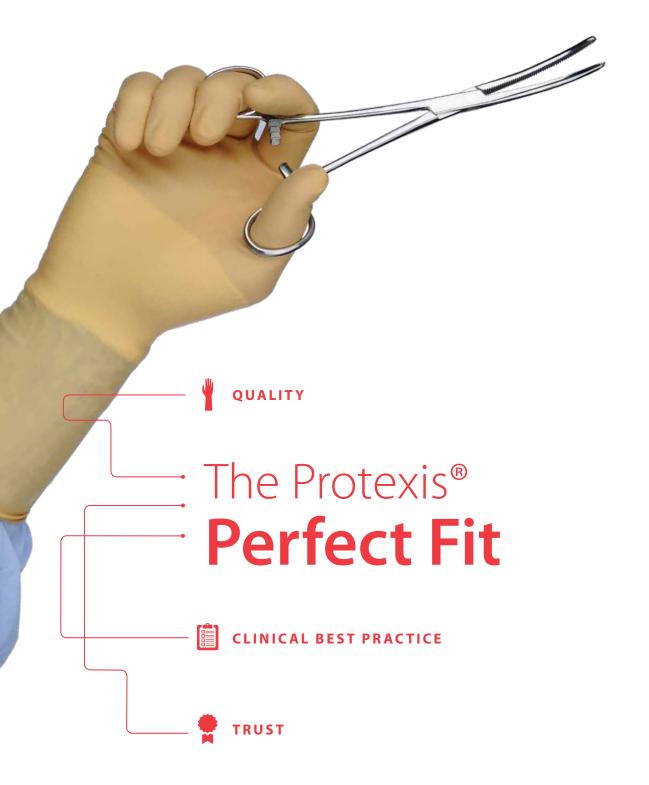
Latex



	Catalog no.	no. Size	Length	Thickness*			Material	Color	Cuff type	Protein	Chemical	Qty/	Qty/
	Catalog IIO.	Size	Length	Finger	Palm	Cuff	Coating in red	Color	Cuii type	content	accelerant	bx	CS
Protexis® Latex Blue with Neu-Thera®	2D72LU55	5.5	11.1 in./ 282mm			5.5 mil/ 0.14mm	Natural rubber latex with nitrile polymer and Neu-Thera® Emollient Coating	Blue	Beaded/ Rolled	Less than 50 micrograms/ gram	Zinc Dibutyldithio- carbamate (ZDBC)		
	2D72LU60	6			5.5 mil/ 0.14mm								
	2D72LU65	6.5	20211111										
	2D72LU70	7		7.7 mil/ 0.20mm								50	200
	2D72LU75	7.5										30	200
	2D72LU80	8	11.6 in./ 295mm										
Pro	2D72LU85	8.5	27311111										
	2D72LU90	9											
Protexis® Latex Micro	2D72NT55X	5.5			5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Natural rubber latex with nitrile polymer	Light Brown	Beaded/ Rolled	Less than 50 micrograms/ gram	Zinc Dibutyldithio- carbamate (ZDBC)	50	
	2D72NT60X	6	11.1 in./ 282mm										
	2D72NT65X	6.5	20211111										200
a te	2D72NT70X	7		6.9 mil/									
· ·	2D72NT75X	7.5		0.18mm									
Promiss 7)	2D72NT80X	8	11.6 in./ 295mm										
Pro	2D72NT85X	8.5	27311111										
	2D72NT90X	9											
Protexis® Latex Ortho	2D72LT60	6	11.1 in./				Natural rubber latex with	Brown	Beaded/ Rolled	Less than 50 micrograms/ gram	Zinc Dibutyldithio- carbamate (ZDBC)	40	
	2D72LT65	6.5	282mm										160
	2D72LT70	7											
	2D72LT75	7.5		13.4 mil/ 0.34mm	9.4 mil/ 0.24mm		water-based hydrogel						
	2D72LT80	8	11.6 in./ 295mm	0.54111111	0.24111111		polymer coating						
	2D72LT85	8.5	293111111										
	2D72LT90	9											
						I.							

^{*}Thickness tested in accordance with ASTM D 3577







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