



**Cardinal Health™**

Protexis® Surgical Gloves





# Contents

- 3 Introduction**
- 4-7 The Protexis® Perfect Fit**
- 8-23 Protexis® Surgical Glove Portfolio**

## **NON-LATEX POLYISOPRENE**

- 9 Protexis® PI
- 10 Protexis® PI with Neu-Thera®
- 11 Protexis® PI Classic
- 12 Protexis® PI Blue with Neu-Thera®
- 13 Protexis® PI Micro
- 14 Protexis® PI Orthopaedic

## **NON-LATEX NEOPRENE**

- 15 Protexis® Neoprene
- 16 Protexis® Neoprene Essential

## **LATEX**

- 17 Protexis® Latex
- 18 Protexis® Latex with Neu-Thera®
- 19 Protexis® Latex Classic
- 20 Protexis® Latex Hydrogel
- 21 Protexis® Latex Blue with Neu-Thera®
- 22 Protexis® Latex Micro
- 23 Protexis® Latex Ortho

- 24 Environmental Stewardship**
- 25-29 Testing Standards and Data**
- 30-34 Product Quick Reference**



Cardinal Health™ Protexis® Surgical Gloves

# 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.



Quality

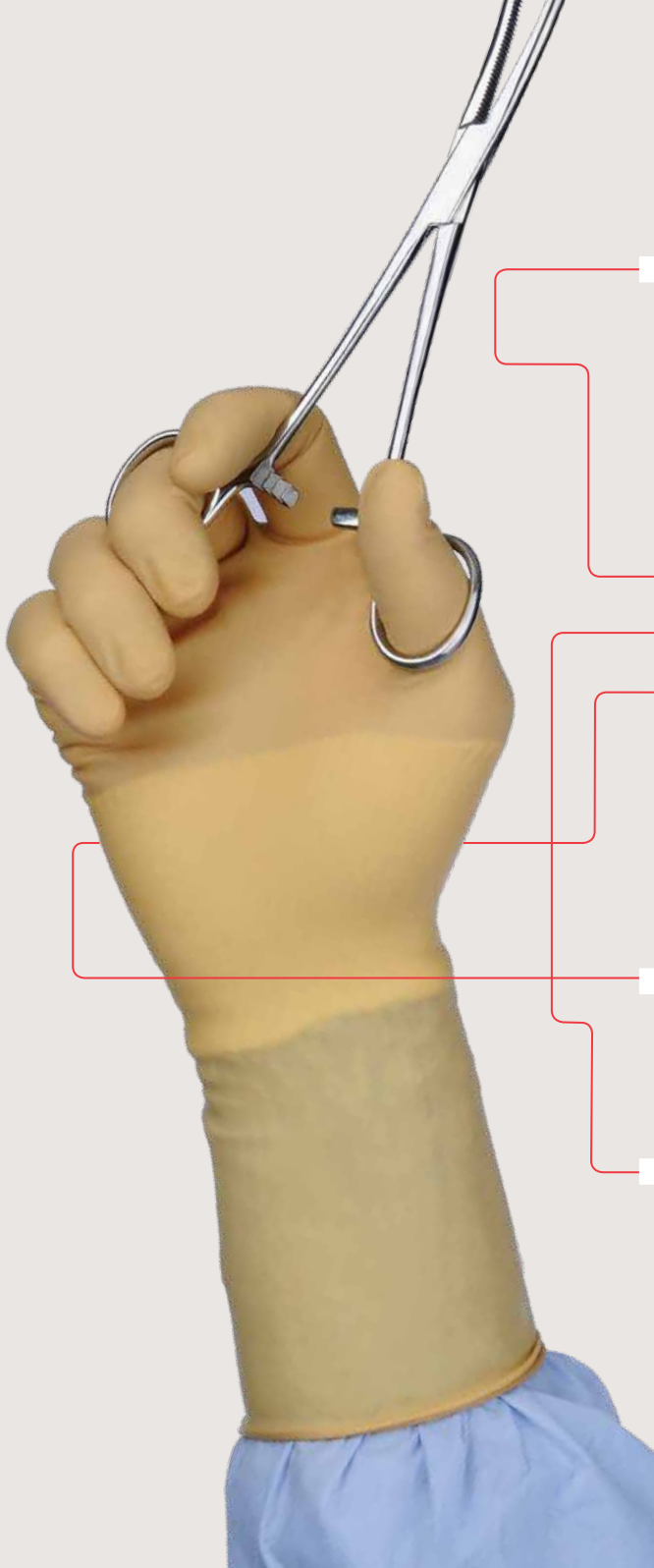


Clinical best practice



Trust

**Are you ready to find your Perfect Fit?**



QUALITY

# The Protexis<sup>®</sup> Perfect Fit



CLINICAL BEST PRACTICE



TRUST

# The Protexis® Perfect Fit

 **QUALITY**

 **CLINICAL BEST PRACTICE**

 **TRUST**

## 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.

 **#1** Surgical gloves in the US<sup>1</sup>

 **2,000** quality variables monitored

 AQL of **0.65**  
exceeding industry standards

 **ISO, EN, ASTM** and **PPE**  
standards met globally



"The gloves fit well and are comfortable."

RN, Top 3 US News & World Report Hospital<sup>2</sup>



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

# The Protexis® Perfect Fit



QUALITY



CLINICAL BEST PRACTICE



TRUST

## 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 system<sup>1</sup>



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



# 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 Roll<sup>2</sup>, 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.<sup>3</sup>

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 Institution<sup>1</sup>



**CardinalHealth**  
Essential to care™



# Cardinal Health™ Protexis® Surgical Gloves Portfolio

## NON-LATEX POLYISOPRENE

- 9 Protexis® PI
- 10 Protexis® PI with Neu-Thera®
- 11 Protexis® PI Classic
- 12 Protexis® PI Blue with Neu-Thera®
- 13 Protexis® PI Micro
- 14 Protexis® PI Orthopaedic

## NON-LATEX NEOPRENE

- 15 Protexis® Neoprene
- 16 Protexis® Neoprene Essential

## LATEX

- 17 Protexis® Latex
- 18 Protexis® Latex with Neu-Thera®
- 19 Protexis® Latex Classic
- 20 Protexis® Latex Hydrogel
- 21 Protexis® Latex Blue with Neu-Thera®
- 22 Protexis® Latex Micro
- 23 Protexis® Latex Ortho






This product is not made with natural rubber latex

# Protexis® PI

- Designed to be comfortable and reliable for any type of surgical procedure
- Our most popular glove in the U.S. — proven success!
- Synthetic, not made with natural rubber latex

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

 See Appendix page 29 for complete testing standards

 See Appendix page 28 for chemotherapy agent permeation results





Protexis® Surgical Gloves




This product is not made with natural rubber latex

# Protexis® PI 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®?

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



See Appendix page 29 for complete testing standards


1. Data on file  
 2. Thickness tested in accordance with ASTM D 3577



This product is not made with natural rubber latex

# Protexis® PI 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

Catalog no.	Size	Length	Thickness <sup>1</sup>			Material	Color	Cuff type	Qty/ bx	Qty/ cs
			Finger	Palm	Cuff					
2D72PL55X	5.5	11.5 in./ 292mm	11.2 mil/ 0.28mm	8.3 mil/ 0.21mm	7.1 mil/ 0.18mm	Synthetic polyisoprene (PI)	 Cream	Beaded/ Rolled	50	200
2D72PL60X	6									
2D72PL65X	6.5									
2D72PL70X	7	12 in./ 305mm								
2D72PL75X	7.5									
2D72PL80X	8									
2D72PL85X	8.5									
2D72PL90X	9									



 See Appendix page 29 for complete testing standards

1. Thickness tested in accordance with ASTM D 3577  
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This product is not made with natural rubber latex


# Protexis® PI Blue with Neu-Thera®

- 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®?

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 no.	Size	Length	Thickness <sup>2</sup>			Material	Color	Cuff type	Qty/ bx	Qty/ cs
			Finger	Palm	Cuff					
2D73EB55	5.5	11.3 in./ 287mm	7.9 mil/ 0.20mm	5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Synthetic polyisoprene (PI) with Neu-Thera® Emollient Coating	 Blue	Beaded/ Rolled	50	200
2D73EB60	6									
2D73EB65	6.5									
2D73EB70	7	11.8 in./ 300mm								
2D73EB75	7.5									
2D73EB80	8									
2D73EB85	8.5									
2D73EB90	9									

 See Appendix page 29 for complete testing standards





1. Data on file  
2. Thickness tested in accordance with ASTM D 3577




This product is not made with natural rubber latex

# Protexis® PI 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 no.	Size	Length	Thickness <sup>1</sup>			Material	Color	Cuff type	Qty/ bx	Qty/ cs
			Finger	Palm	Cuff					
2D73PM55	5.5	11.3 in./ 287mm	7.9 mil/ 0.20mm	5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Synthetic polyisoprene (PI)	 Cream	Beaded/ Rolled	50	200
2D73PM60	6									
2D73PM65	6.5									
2D73PM70	7	11.8 in./ 300mm	7.9 mil/ 0.20mm	5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Synthetic polyisoprene (PI)	 Cream	Beaded/ Rolled	50	200
2D73PM75	7.5									
2D73PM80	8									
2D73PM85	8.5									
2D73PM90	9									

 See Appendix page 29 for complete testing standards






This product is not made with natural rubber latex



# Protexis® PI Orthopaedic

- 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

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



See Appendix page 29 for complete testing standards



<sup>1</sup> Thickness tested in accordance with ASTM D 3577



This product is not made with natural rubber latex

# Protexis® Neoprene

- Thinner and softer for enhanced tactile response<sup>1</sup>
- Synthetic, not made with natural rubber latex

Catalog no.	Size	Length	Thickness <sup>2</sup>			Material	Color	Cuff type	Qty/ bx	Qty/ cs
			Finger	Palm	Cuff					
2D73DP55	5.5	11.1 in./ 282mm	6.7 mil/ 0.17mm	5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Synthetic neoprene with nitrile polymer coating		Beaded/ Rolled	50	200
2D73DP60	6									
2D73DP65	6.5									
2D73DP70	7	11.7 in./ 297mm	6.7 mil/ 0.17mm	5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Synthetic neoprene with nitrile polymer coating		Beaded/ Rolled	50	200
2D73DP75	7.5									
2D73DP80	8									
2D73DP85	8.5									
2D73DP90	9									



See Appendix page 29 for complete testing standards



See Appendix page 28 for chemotherapy agent permeation results

1. Compared to other standard gloves in Protexis® portfolio

2. Thickness tested in accordance with ASTM D 3577


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This product is not made with natural rubber latex

# 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.<sup>1</sup>
- Synthetic, not made with natural rubber latex

Catalog no.	Size	Length	Thickness <sup>2</sup>			Material	Color	Cuff type	Qty/ bx	Qty/ cs
			Finger	Palm	Cuff					
2D73DS55	5.5	11.1 in./ 282mm	6.7 mil/ 0.17mm	≥ 5.5mil/ ≥ 0.14mm	≥ 5.5mil/ ≥ 0.14 mm	Synthetic neoprene with nitrile polymer coating	 Light brown	Beaded/ Rolled	50	200
2D73DS60	6									
2D73DS65	6.5									
2D73DS70	7	11.7 in./ 297mm								
2D73DS75	7.5									
2D73DS80	8									
2D73DS85	8.5									
2D73DS90	9									

-  See Appendix page 29 for complete testing standards
-  Not made with traditional chemical accelerators
-  See Appendix page 28 for chemotherapy agent permeation results



1. Cao, Lauren, et al. "Allergic Contact Dermatitis to Synthetic Rubber Gloves: Changing Trends in Patch Test Reactions to Accelerators." *Arch Dermatol.* 2010; 146 (9): 1001-1007.  
 2. Thickness tested in accordance with ASTM D 3577







NATURAL RUBBER LATEX

# 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.	Size	Length	Thickness <sup>1</sup>			Material	Color	Cuff type	Protein content <sup>2</sup>	Qty/ bx	Qty/ cs
			Finger	Palm	Cuff						
2D72NS55X	5.5	11.1 in./ 282mm	9.8 mil/ 0.25mm	7.9 mil/ 0.20mm	7.5 mil/ 0.19mm	Natural rubber latex with nitrile polymer coating	 Light Brown	Beaded/ Rolled	Less than 50 micrograms/gram	50	200
2D72NS60X	6										
2D72NS65X	6.5										
2D72NS70X	7										
2D72NS75X	7.5										
2D72NS80X	8										
2D72NS85X	8.5										
2D72NS90X	9	11.6 in./ 295mm									



 See Appendix page 29 for complete testing standards

1. Thickness tested in accordance with ASTM D 3577

2. Protein content tested using ASTM D 5712

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NATURAL RUBBER LATEX

# 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

## Ⓞ What is Neu-Thera®?

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

Ⓞ See Appendix page 29 for complete testing standards



1. Data on file  
 2. Thickness tested in accordance with ASTM D 3577  
 3. Protein content tested using ASTM D 5712

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NATURAL RUBBER LATEX



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



 See Appendix page 29 for complete testing standards

1. Thickness tested in accordance with ASTM D 3577

2. Protein content tested using ASTM D 5712

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Protexis® Surgical Gloves




NATURAL RUBBER LATEX




# 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 no.	Size	Length	Thickness <sup>1</sup>			Material	Color	Cuff type	Protein content <sup>2</sup>	Qty/ bx	Qty/ cs
			Finger	Palm	Cuff						
2D72LS55	5.5	11.5 in./ 292mm	9.8 mil/ 0.25mm	9.1 mil/ 0.23mm	7.1 mil/ 0.18mm	Natural rubber latex coated with acrylic hydrogel polymer coating	 Translucent Yellow	Beaded/ Rolled	Less than 50 micrograms/gram	50	200
2D72LS60	6										
2D72LS65	6.5										
2D72LS70	7	12 in./ 305mm									
2D72LS75	7.5										
2D72LS80	8										
2D72LS85	8.5										
2D72LS90	9										



 See Appendix page 29 for complete testing standards

1. Thickness tested in accordance with ASTM D 3577

2. Protein content tested using ASTM D 5712

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Protexis® Surgical Gloves




NATURAL RUBBER LATEX

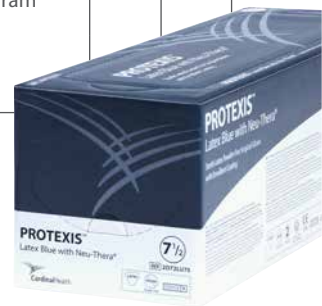
# Protexis® Latex Blue with Neu-Thera®

- 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 no.	Size	Length	Thickness²			Material	Color	Cuff type	Protein content³	Qty/ bx	Qty/ cs
			Finger	Palm	Cuff						
2D72LU55	5.5	11.1 in./ 282mm	7.7 mil/ 0.20mm	5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Natural rubber latex with nitrile polymer and Neu-Thera® Emollient Coating	 Blue	Beaded/ Rolled	Less than 50 micrograms/gram	50	200
2D72LU60	6										
2D72LU65	6.5										
2D72LU70	7	11.6 in./ 295mm									
2D72LU75	7.5										
2D72LU80	8										
2D72LU85	8.5										
2D72LU90	9										



Ⓞ See Appendix page 29 for complete testing standards

1. Data on file  
 2. Thickness tested in accordance with ASTM D 3577  
 3. Protein content tested using ASTM D 5712







NATURAL RUBBER LATEX

# 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

Catalog no.	Size	Length	Thickness <sup>1</sup>			Material	Color	Cuff type	Protein content <sup>2</sup>	Qty/ bx	Qty/ cs
			Finger	Palm	Cuff						
2D72NT55X	5.5	11.1 in./ 282mm	6.9 mil/ 0.18mm	5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Natural rubber latex with nitrile polymer coating	 Light brown	Beaded/ Rolled	Less than 50 micrograms/ gram	50	200
2D72NT60X	6										
2D72NT65X	6.5										
2D72NT70X	7	11.6 in./ 295mm									
2D72NT75X	7.5										
2D72NT80X	8										
2D72NT85X	8.5										
2D72NT90X	9										

 See Appendix page 29 for complete testing standards



1. Thickness tested in accordance with ASTM D 3577

2. Protein content tested using ASTM D 5712

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NATURAL RUBBER LATEX



# 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 no.	Size	Length	Thickness <sup>1</sup>			Material	Color	Cuff type	Protein content <sup>2</sup>	Qty/ bx	Qty/ cs
			Finger	Palm	Cuff						
2D72LT60	6	11.1 in./ 282mm	13.4 mil/ 0.34mm	9.4 mil/ 0.24mm	8.3 mil/ 0.21mm	Natural rubber latex with water-based hydrogel polymer coating	 Brown	Beaded/ Rolled	Less than 50 micrograms/ gram	40	160
2D72LT65	6.5										
2D72LT70	7										
2D72LT75	7.5	11.6 in./ 295mm									
2D72LT80	8										
2D72LT85	8.5										
2D72LT90	9										



See Appendix page 29 for complete testing standards

1. Thickness tested in accordance with ASTM D 3577

2. Protein content tested using ASTM D 5712

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**CardinalHealth**

Essential to care™

# 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 PRACTICES<sup>1</sup>

**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**

1. Results on file





# Cardinal Health™ Protexis® Testing standards and technical data

# Non-latex polyisoprene



This product is not made with natural rubber latex



## PROPERTIES (BEFORE AGING)

	Protexis® PI	Protexis® PI with Neu-Thera®	Protexis® PI Classic	Protexis® PI Blue with Neu-Thera®	Protexis® PI Micro	Protexis® PI Orthopaedic
Tensile strength (min)	17 MPa <sup>1</sup>	17 MPa <sup>1</sup>	17 MPa <sup>1</sup>	17 MPa <sup>1</sup>	17 MPa <sup>1</sup>	17 Mpa <sup>1</sup>
Stress at 500% elongation (modulus) (max)	7.0 MPa <sup>1</sup>	7.0 MPa <sup>1</sup>	7.0 MPa <sup>1</sup>	7.0 MPa <sup>1</sup>	7.0 MPa <sup>1</sup>	7.0 Mpa <sup>1</sup>
Ultimate elongation (elasticity) (min)	650% <sup>1</sup>	650% <sup>1</sup>	650% <sup>1</sup>	650% <sup>1</sup>	650% <sup>1</sup>	650% <sup>1</sup>
Puncture resistance (cuff) (min)	5N <sup>2</sup>	5N <sup>3</sup>	5N <sup>4</sup>	5N <sup>5</sup>	5N <sup>3</sup>	5N <sup>6</sup>
Freedom from holes <sup>8</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>
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



This product is not made with natural rubber latex



## PROPERTIES (BEFORE AGING)

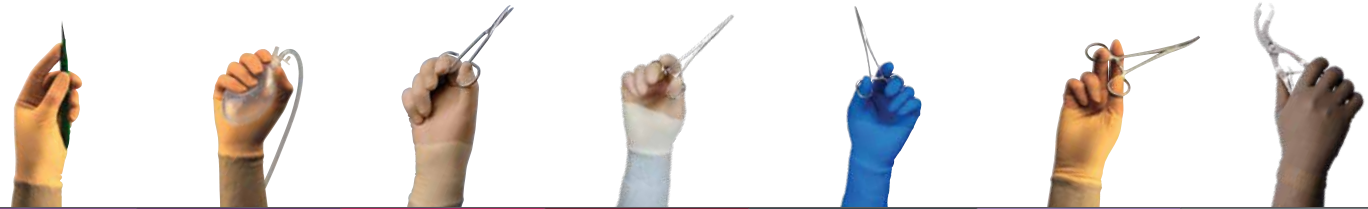
	Protexis® Neoprene	Protexis® Neoprene Essential
Tensile strength (min)	17 MPa <sup>1</sup>	17 MPa <sup>1</sup>
Stress at 500% elongation (modulus) (max)	7.0 MPa <sup>1</sup>	7.0 MPa <sup>1</sup>
Ultimate elongation (elasticity) (min)	650% <sup>1</sup>	650% <sup>1</sup>
Puncture resistance (cuff) (min)	5N <sup>6</sup>	—
Freedom from holes <sup>8</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>
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

# Latex



NATURAL RUBBER LATEX



**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 <sup>1</sup>	24 MPa <sup>1</sup>	24 MPa <sup>1</sup>	24 MPa <sup>1</sup>	24 MPa <sup>1</sup>	24 MPa <sup>1</sup>	24 Mpa <sup>1</sup>
Stress at 500% elongation (modulus) (max)	5.5 MPa <sup>1</sup>	7.0 MPa <sup>1</sup>	5.5 MPa <sup>1</sup>	5.5 MPa <sup>1</sup>	5.5 MPa <sup>1</sup>	5.5 MPa <sup>1</sup>	5.5 Mpa <sup>1</sup>
Ultimate elongation (elasticity) (min)	750% <sup>1</sup>	650% <sup>1</sup>	750% <sup>1</sup>	750% <sup>1</sup>	750% <sup>1</sup>	750% <sup>1</sup>	750% <sup>1</sup>
Puncture resistance (cuff) (min)	5N <sup>2</sup>	5N <sup>2</sup>	5N <sup>2</sup>	5N <sup>2</sup>	5N <sup>2</sup>	5N <sup>2</sup>	5N <sup>2</sup>
Freedom from holes	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>	0.65 AQL <sup>1</sup>
Sterilization	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation
Accelerant	ZDBC (Zinc Dibutyldithiocarbamate)						

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/cm <sup>2</sup> /minute)		
	Protexis® PI	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 gloves 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.

1. 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)

<b>ASTM D3577, EN 455-2, ISO 10282</b>	Physical dimension (length, width, palm)
<b>ASTM D3577, EN 455-2, ISO 10282</b>	Physical properties (tensile strength)
<b>ASTM D624</b>	Tear strength testing (T-tear, V-tear)
<b>AS/NZA 4179</b>	Puncture resistant testing
<b>ASTM D5151, EN 455-1, ISO 10282</b>	Freedom from holes (water-tightness)
<b>ASTM D6124, EN ISO 21171</b>	Powder residue for powder-free gloves
<b>ASTM D6124</b>	Powder amount for powdered gloves
<b>ASTM D5712</b>	Aqueous extractable protein content
<b>ASTM D6499</b>	Antigenic protein content
<b>EN 455-3</b>	Leachable protein level, modified Lowry method
<b>ASTM D7102, EN 455-3</b>	Endotoxin
<b>ASTM D7160</b>	Storage stability, accelerated aging
<b>ASTM D7161</b>	Storage stability, real-time aging
<b>ASTM F739, EN 16523</b>	Lab chemical permeation
<b>ASTM D6978, EN 16523</b>	Chemotherapy drug permeation (results on page 28)
<b>ASTM F1671</b>	Bacteriophage penetration
<b>ISO 10993-10</b>	Sensitivity testing & primary skin irritation
<b>ISO 10993-5</b>	Cytotoxicity testing
<b>ISO 10993-11</b>	Systemic Toxicity Testing (Acute)
<b>ASTM D3577</b>	Sterility test

## PPE REQUIRED TESTING (results on file)

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

## INTERNAL PROCEDURES (results on file)







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





This product is not made with natural rubber latex

# Non-latex polyisoprene







	Catalog no.	Size	Length	Thickness*			Material <i>Coating in red</i>	Color	Cuff type	Chemical accelerant	Qty/ bx	Qty/ cs
				Finger	Palm	Cuff						
 Protexis® PI	2D72PT55X	5.5	11.3 in./ 287mm	9.1 mil/ 0.23mm	9.8 mil/ 0.25mm	6.7 mil/ 0.17mm	Synthetic polyisoprene (PI)	 Cream	Beaded/ Rolled	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC) 3. Zinc-2-mercaptobenzothiazole (ZMBT)	50	200
	2D72PT60X	6										
	2D72PT65X	6.5										
	2D72PT70X	7	11.8 in./ 300mm									
	2D72PT75X	7.5										
	2D72PT80X	8										
	2D72PT85X	8.5										
2D72PT90X	9											
 Protexis® PI with Neu-Thera®	2D73TE55	5.5	11.3 in./ 287mm	9.1 mil/ 0.23mm	9.8 mil/ 0.25mm	6.7 mil/ 0.17mm	Synthetic polyisoprene (PI) with Neu-Thera® Emollient Coating	 Cream	Beaded/ Rolled	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC) 3. Zinc-2-mercaptobenzothiazole (ZMBT)	50	200
	2D73TE60	6										
	2D73TE65	6.5										
	2D73TE70	7	11.8 in./ 300mm									
	2D73TE75	7.5										
	2D73TE80	8										
	2D73TE85	8.5										
2D73TE90	9											
 Protexis® PI Classic	2D72PL55X	5.5	11.5 in./ 292mm	11.2 mil/ 0.28mm	8.3 mil/ 0.21mm	7.1 mil/ 0.18mm	Synthetic polyisoprene (PI)	 Cream	Beaded/ Rolled	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC) 3. Zinc-2-mercaptobenzothiazole (ZMBT)	50	200
	2D72PL60X	6										
	2D72PL65X	6.5										
	2D72PL70X	7	12 in./ 305mm									
	2D72PL75X	7.5										
	2D72PL80X	8										
	2D72PL85X	8.5										
2D72PL90X	9											

\*Thickness tested in accordance with ASTM D 3577



This product is not made with natural rubber latex

# Non-latex polyisoprene





	Catalog no.	Size	Length	Thickness*			Material <i>Coating in red</i>	Color	Cuff type	Chemical accelerant	Qty/ bx	Qty/ cs
				Finger	Palm	Cuff						
 <b>Protexis® PI Blue with Neu-Thera®</b>	2D73EB55	5.5	11.3 in./ 287mm	7.9 mil/ 0.20mm	5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Synthetic polyisoprene (PI) <b>with Neu-Thera® Emollient Coating</b>	 Blue	Beaded/ Rolled	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC) 3. Zinc-2-mercaptobenzothiazole (ZMBT)	50	200
	2D73EB60	6										
	2D73EB65	6.5										
	2D73EB70	7	11.8 in./ 300mm									
	2D73EB75	7.5										
	2D73EB80	8										
	2D73EB85	8.5										
	2D73EB90	9										
 <b>Protexis® PI Micro</b>	2D73PM55	5.5	11.3 in./ 287mm	7.9 mil/ 0.20mm	5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Synthetic polyisoprene (PI)	 Cream	Beaded/ Rolled	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC) 3. Zinc-2-mercaptobenzothiazole (ZMBT)	50	200
	2D73PM60	6										
	2D73PM65	6.5										
	2D73PM70	7	11.8 in./ 300mm									
	2D73PM75	7.5										
	2D73PM80	8										
	2D73PM85	8.5										
	2D73PM90	9										
 <b>Protexis® PI Orthopaedic</b>	2D73HT60	6	11.5 in./ 291mm	13.4 mil/ 0.34mm	10.2 mil/ 0.26mm	8.3 mil/ 0.21mm	Synthetic polyisoprene (PI) <b>with water-based hydrogel polymer coating</b>	 Brown	Beaded/ Rolled	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC) 3. Zinc-2-mercaptobenzothiazole (ZMBT)	40	160
	2D73HT65	6.5										
	2D73HT70	7	12.0 in./ 305mm									
	2D73HT75	7.5										
	2D73HT80	8										
	2D73HT85	8.5										
	2D73HT90	9										

\*Thickness tested in accordance with ASTM D 3577



This product is not made with natural rubber latex

# Non-latex neoprene









	Catalog no.	Size	Length	Thickness*			Material <i>Coating in red</i>	Color	Cuff type	Chemical accelerant	Qty/ bx	Qty/ cs
				Finger	Palm	Cuff						
 Protexis® Neoprene	2D73DP55	5.5	11.1 in./ 282mm	6.7 mil/ 0.17mm	5.5 mil/ 0.14mm	5.5 mil/ 0.14mm	Synthetic neoprene with nitrile polymer	 Light Brown	Beaded/ Rolled	Zinc Dibutyldithiocarbamate (ZDBC)	50	200
	2D73DP60	6										
	2D73DP65	6.5										
	2D73DP70	7	11.7 in./ 297mm									
	2D73DP75	7.5										
	2D73DP80	8										
	2D73DP85	8.5										
	2D73DP90	9										
 Protexis® Neoprene Essential	2D73DS55	5.5	11.1 in./ 282mm	6.7 mil/ 0.17mm	≥ 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	200
	2D73DS60	6										
	2D73DS65	6.5										
	2D73DS70	7	11.7 in./ 297mm									
	2D73DS75	7.5										
	2D73DS80	8										
	2D73DS85	8.5										
	2D73DS90	9										

\*Thickness tested in accordance with ASTM D 3577



# Latex






	Catalog no.	Size	Length	Thickness*			Material <i>Coating in red</i>	Color	Cuff type	Protein content	Chemical accelerant	Qty/ bx	Qty/ cs
				Finger	Palm	Cuff							
 Protexis® Latex	2D72NS55X	5.5	11.1 in./ 282mm	9.8 mil/ 0.25mm	7.9 mil/ 0.20mm	7.5 mil/ 0.19mm	Natural rubber latex <b>with nitrile polymer</b>	 Light Brown	Beaded/ Rolled	Less than 50 micrograms/ gram	Zinc Dibutyldithio-carbamate (ZDBC)	50	200
	2D72NS60X	6											
	2D72NS65X	6.5											
	2D72NS70X	7											
	2D72NS75X	7.5											
	2D72NS80X	8											
	2D72NS85X	8.5											
2D72NS90X	9	11.6 in./ 295mm											
 Protexis® Latex with Neu-Thera®	2D73TP55	5.5	11.1 in./ 282mm	9.3 mil/ 0.24mm	7.9 mil/ 0.20mm	7.5 mil/ 0.19mm	Natural rubber latex <b>with nitrile polymer and Neu-Thera® Emollient Coating</b>	 Light Brown	Beaded/ Rolled	Less than 50 micrograms/ gram	Zinc Dibutyldithio-carbamate (ZDBC)	50	200
	2D73TP60	6											
	2D73TP65	6.5											
	2D73TP70	7											
	2D73TP75	7.5											
	2D73TP80	8											
	2D73TP85	8.5											
2D73TP90	9	11.7 in./ 297mm											
 Protexis® Latex Classic	2D72N55X	5.5	11.5 in./ 292mm	9.8 mil/ 0.25mm	7.9 mil/ 0.20mm	7.5 mil/ 0.19mm	Natural rubber latex <b>with nitrile polymer</b>	 Cream	Beaded/ Rolled	Less than 50 micrograms/ gram	Zinc Dibutyldithio-carbamate (ZDBC)	50	200
	2D72N60X	6											
	2D72N65X	6.5											
	2D72N70X	7											
	2D72N75X	7.5											
	2D72N80X	8											
	2D72N85X	8.5											
2D72N90X	9	12 in./ 305mm											
 Protexis® Latex Hydrogel	2D72LS55	5.5	11.5 in./ 292mm	9.8 mil/ 0.25mm	9.1 mil/ 0.23mm	7.1 mil/ 0.18mm	Natural rubber latex <b>with acrylic hydrogel polymer</b>	 Translucent Yellow	Beaded/ Rolled	Less than 50 micrograms/ gram	Zinc Dibutyldithio-carbamate (ZDBC)	50	200
	2D72LS60	6											
	2D72LS65	6.5											
	2D72LS70	7											
	2D72LS75	7.5											
	2D72LS80	8											
	2D72LS85	8.5											
2D72LS90	9	12 in./ 305mm											

\*Thickness tested in accordance with ASTM D 3577

# Latex



	Catalog no.	Size	Length	Thickness*			Material Coating in red	Color	Cuff type	Protein content	Chemical accelerant	Qty/ bx	Qty/ cs
				Finger	Palm	Cuff							
Protexis® Latex Blue with Neu-Thera®	2D72LU55	5.5	11.1 in./ 282mm	7.7 mil/ 0.20mm	5.5 mil/ 0.14mm	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)	50	200
	2D72LU60	6											
	2D72LU65	6.5											
	2D72LU70	7	11.6 in./ 295mm										
	2D72LU75	7.5											
	2D72LU80	8											
	2D72LU85	8.5											
	2D72LU90	9											
Protexis® Latex Micro	2D72NT55X	5.5	11.1 in./ 282mm	6.9 mil/ 0.18mm	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	200
	2D72NT60X	6											
	2D72NT65X	6.5											
	2D72NT70X	7	11.6 in./ 295mm										
	2D72NT75X	7.5											
	2D72NT80X	8											
	2D72NT85X	8.5											
	2D72NT90X	9											
Protexis® Latex Ortho	2D72LT60	6	11.1 in./ 282mm	13.4 mil/ 0.34mm	9.4 mil/ 0.24mm	8.3 mil/ 0.21mm	Natural rubber latex with water-based hydrogel polymer coating	 Brown	Beaded/ Rolled	Less than 50 micrograms/ gram	Zinc Dibutyldithio-carbamate (ZDBC)	40	160
	2D72LT65	6.5											
	2D72LT70	7	11.6 in./ 295mm										
	2D72LT75	7.5											
	2D72LT80	8											
	2D72LT85	8.5											
2D72LT90	9												

\*Thickness tested in accordance with ASTM D 3577



 **QUALITY**

# The Protexis<sup>®</sup> **Perfect Fit**

 **CLINICAL BEST PRACTICE**

 **TRUST**

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