

**Cardinal Health™** 

Protexis<sup>™</sup> Surgical Gloves





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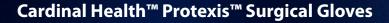
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# Protecting the hands that heal.



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 contribute to 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™ Surgical Glove, to provide you with the **Perfect Fit** for every type of procedure.







Clinical best practice



Trus

Are you ready to find your Perfect Fit?



## **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 United States News & World Report Hospital<sup>1</sup>



quality variables monitored



 $_{AQL\,of}$  < 0.65exceeding industry standards



ISO, EN, ASTM and PPE standards met globally



## **Perfect Fit**







## A mold unlike any other.

There are important differences in surgical glove manufacturing and technology that can impact the way a glove feels and performs. We believe that the surgical glove mold used makes all the difference in the fit and feel of the glove.

The Cardinal Health™ Surgical Glove mold features an independent thumb design — meaning the finger placement replicates the anatomical position of a resting hand — allowing for natural, comfortable movement.

One study shows that gloves featuring an independent thumb require less force for similar displacements of the thumb than those gloves produced without an independent thumb feature.

No matter what type of surgery you are in, surgical gloves produced on a mold with an independent thumb design ultimately can help reduce hand fatigue so you can perform at your best.

Less flexion and extension force required across the palm due to independent thumb design. Anatomic thumb to reduce thumb and hand fatigue. Interlocking beaded cuff to help prevent roll down.

 Bennet, M. A. & Tekamp, D. A. Surgical Glove Comparison Testing. Stress Engineering Services. February 2012.

### **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 operating room.



"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 in the United States<sup>1</sup>





Videos Clinically-authored white papers and journals

Posters, fact sheets and interactive tools

Sampling, sizing and product evaluation support



Latex safety

Double-gloving

Dermatitis prevention

1. Techvalidate Research Study, December 2017.



## **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. We have developed best-in-class conversion processes to help you improve efficiency, while reducing inventory and costs through standardization.

In fact, **79%** of our customers in the United States actually saved money when they went latex-free with Protexis<sup>TM</sup> Surgical Gloves.<sup>2</sup>



"The Cardinal Health team made the conversion seamless."

VP of Perioperative Services, Large Academic Teaching Institution in the United States<sup>1</sup>



<sup>1.</sup> GHX Units, All Channels, 2017.

<sup>2.</sup> Techvalidate Research Study, December 2017.

# Cardinal Health™ Protexis™ Surgical Gloves Portfolio

#### **NON-LATEX POLYISOPRENE**

- 10 Protexis<sup>™</sup> PI
- 11 Protexis™ PI with Neu-Thera™
- 12 Protexis™ PI Blue with Neu-Thera™
- 13 Protexis™ Pl Micro
- 14 Protexis™ PI Orthopaedic
- 15 Protexis™ Pl Ortho

#### **NON-LATEX NEOPRENE**

- 16 Protexis™ Neoprene
- 17 Protexis™ Neoprene Essential

#### LATEX

- 18 Protexis<sup>™</sup> Latex
- 19 Protexis™ Latex with Neu-Thera™
- 20 Protexis<sup>™</sup> Latex Essential
- 21 Protexis™ Latex Blue with Neu-Thera™
- 22 Protexis™ Latex Micro
- 23 Protexis™ Latex Ortho







## Protexis<sup>™</sup> Pl Surgical Gloves

- Engineered to protect in a wide array of clinical cases
- A multipurpose solution that offers tactile response with barrier protection
- Synthetic, not made with natural rubber latex

Catalanna	c:	Iakb		Thickness <sup>1</sup>		BA - 4 - via I	Calan	Cuff	Qty/	Qty/
Catalog no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	bx	CS
2D72PT55X	5.5									
2D72PT60X	6	287mm								
2D72PT65X	6.5									
2D72PT70X	7		0.22	0.17	0.17	Synthetic		Beaded/		200
2D72PT75X	7.5		0.23mm	0.17mm	0.17mm	polyisoprene (PI)	Cream	Rolled	50	200
2D72PT80X	8	300mm								
2D72PT85X	8.5									
2D72PT90X	9	1								



See Appendix page 29 for complete testing standards









# Protexis<sup>™</sup> Pl with Neu-Thera<sup>™</sup> Surgical Gloves

- Designed to be comfortable and reliable for a broad range of surgical procedures
- Same great engineering as our Protexis<sup>™</sup> Pl Surgical gloves with our patented **Neu-Thera**<sup>™</sup> Coating
- Synthetic, not made with natural rubber latex

#### **(b)** What is Neu-Thera<sup>™</sup> Coating?<sup>1</sup>

We place moisturizing Neu-Thera<sup>™</sup> Coating on the inside of Protexis<sup>™</sup> PI with Neu-Thera<sup>™</sup> Surgical Gloves to **help promote overall skin wellness and support hand health.** It provides relief of dry, flaky skin and minimizes skin shedding.

Catalog	Size	Longth		Thickness <sup>2</sup>		Material	Color	Cuff	Qty/	Qty/
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	bx	cs
2D73TE55	5.5									
2D73TE60	6	287mm								
2D73TE65	6.5					Synthetic				
2D73TE70	7		0.22	0.35	0.17	polyisoprene (PI) with		Beaded/		200
2D73TE75	7.5		0.23mm	0.25mm	0.17mm	Neu-Thera™		Rolled	50	200
2D73TE80	8	300mm				Emollient Coating	Cream			
2D73TE85	8.5							Marketo.	A	



2D73TE90

See Appendix page 29 for complete testing standards



PROTEXIS

<sup>1.</sup> Data on file

<sup>2.</sup> Thickness tested in accordance with ASTM D 3577



Protexis<sup>™</sup> Pl Blue with Neu-Thera<sup>™</sup> Surgical Gloves

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

**Mhat is Neu-Thera™ Coating?**¹

We place moisturizing Neu-Thera™ Coating on the inside of Protexis™ PI Blue with Neu-Thera™ Surgical Gloves to help promote overall skin wellness and support hand health. It provides relief of dry, flaky skin and minimizes skin shedding.

Catalog	Cino	Langeth		Thickness <sup>2</sup>		Matavial	Color	Cuff	Qty/	Qty/
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	bx	cs
2D73EB55	5.5									
2D73EB60	6	287mm								
2D73EB65	6.5					Synthetic				
2D73EB70	7		0.20	0.14	0.14	polyisoprene (PI) with		Beaded/		200
2D73EB75	7.5		0.20mm	0.14mm	0.14mm	Neu-Thera™		Rolled	50	200
2D73EB80	8	300mm				Emollient Coating	Blue			
2D73EB85	8.5							2000		
2D73EB90	9	1								



See Appendix page 29 for complete testing standards



PROTEXIS

Protexis™ Surgical Gloves

<sup>2.</sup> Thickness tested in accordance with ASTM D 3577





## Protexis<sup>™</sup> Pl Micro Surgical Gloves

- Stretches and conforms to your hand contour, staying comfortably in place
- Good solution 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 <sup>1</sup>		Managial	Calari	Cuff	Qty/	Qty/
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	bx	CS
2D73PM55	5.5									
2D73PM60	6	287mm								
2D73PM65	6.5									
2D73PM70	7		0.20mm	0.14mm	0.14mm	Synthetic		Beaded/	50	200
2D73PM75	7.5		0.2011111	0.14mm	0.14mm	polyisoprene (PI)		Rolled	50	200
2D73PM80	8	300mm					Cream			
2D73PM85	8.5									
2D73PM90	9									



See Appendix page 29 for complete testing standards











## Protexis<sup>™</sup> Pl Orthopaedic Surgical Gloves

- 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:	Langth		Thickness <sup>1</sup>		Matavial	Colon	Cull turns	Qty/	Qty/
Catalog no.	Size	Length	Finger	Palm	Cuff	Material	Color	Cuff type	bx	CS
2D73HT60	6	291mm								
2D73HT65	6.5	291111111				Synthetic				
2D73HT70	7					polyisoprene (PI) with				
2D73HT75	7.5		0.34mm	0.26mm	0.21mm	water-based		Beaded/ Rolled	40	160
2D73HT80	8	305mm				hydrogel polymer	Brown	Honed		
2D73HT85	8.5					coating	2.3			4
2D73HT90	9								innere de la constante de la c	



See Appendix page 29 for complete testing standards







## Protexis<sup>™</sup> Pl Ortho Surgical Gloves

- Designed for use in orthopaedic procedures or other procedures where a thicker barrier\* may be required
- Can be worn as a stand alone, when a single layer of protection is preferred or as the top or bottom gloves when double-gloving
- Synthetic, not made with natural rubber latex

Catalog	c:	L a se sidde		Thickness <sup>1</sup>		Massacial	Calan	C. II T.	Qty/	Qty/
No.	Size	Length	Size	Length	Finger	Material	Color	Cuff Type	bx	CS
2D73ET60	6	292mm								
2D73ET65	6.5	292111111								
2D73ET70	7					Synthetic				
2D73ET75	7.5		0.30mm	0.21mm	0.19mm	polyisoprene		Beaded/ Rolled	40	160
2D73ET80	8	305mm				(PI)	Cream	Honed		
2D73ET85	8.5									-
2D73ET80	9								4	



See Appendix page 29 for complete testing standards









## Protexis<sup>™</sup> Neoprene Surgical Gloves

- Thinner and softer for enhanced tactile response\*
- Synthetic, not made with natural rubber latex

Catalog	c:			Thickness <sup>1</sup>			6.1	Cuff	١,
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	
2D73DP55	5.5								Γ
2D73DP60	6	280mm							
2D73DP65	6.5					Synthetic			
2D73DP70	7		0.17	0.14	0.14	neoprene with		Beaded/	
2D73DP75	7.5		0.17mm	0.14mm	0.14mm	nitrile	Limbe	Rolled	
2D73DP80	8	296mm				polymer coating	Light brown		
2D73DP85	8.5								
2D73DP90	9								-



See Appendix page 29 for complete testing standards



 ${\it See Appendix page 28 for chemotherapy agent permeation results}$ 







50

200





## Protexis<sup>™</sup> Neoprene Essential Surgical Gloves

- Manufactured without traditional chemical accelerators that have been known to cause skin sensitivities<sup>2</sup>
- Smooth finish for tactile sensitivity
- Nitrile coating for strength, protection and easy donnability
- Synthetic, not made with natural rubber latex

Catalana	c:			Thickness <sup>1</sup>		80-4	Calan	C	Qty/	Qty/
Catalog no.	Size	Length	Finger	Palm	Cuff	Material	Color	Cuff type	bx	cs
2D73DS55	5.5									
2D73DS60	6	281mm								
2D73DS65	6.5					Synthetic				
2D73DS70	7		0.17mm	≥ 0.14mm	> 0.14	neoprene m with nitrile polymer coating	Light	Beaded/ Rolled	F0	200
2D73DS75	7.5		0.17mm		≥ 0.14 mm				50	200
2D73DS80	8	295mm								
2D73DS85	8.5									4
2D73DS90	9	]						1		



See Appendix page 29 for complete testing standards



Not made with chemical accelerators





The chemical accelerators commonly used during traditional manufacturing of surgical gloves are DPG, MBTs, Thiurams, and Carbamates.







## Protexis<sup>™</sup> Latex Surgical Gloves

- 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<sup>2</sup>

Catalanna	C:	Langeth		Thickness <sup>3</sup>	:	Material	Color	Cuff	Protein	Qty/	Qty/
Catalog no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	content⁴	bx	cs
2D72NS55X	5.5										
2D72NS60X	6	282mm				Natural					
2D72NS65X	6.5					rubber			Less than		
2D72NS70X	7		0.25mm	0.20mm	0.19mm	latex with		Beaded/	50	50	200
2D72NS75X	7.5		0.2311111	0.2011111	0.19111111	nitrile	Liabt	Rolled	micrograms/	30	200
2D72NS80X	8	295mm				polymer	Light Brown		gram		
2D72NS85X	8.5					coating				45	
2D72NS90X	9								A STATE OF THE STA	A STORY	-



See Appendix page 29 for complete testing standards



- Caution: This product contains natural rubber latex which may cause allergic reactions, including anaphylactic response
- 2. As compared to other colored gloves in the Protexis™ Latex Surgical Gloves portfolio
- 3. Thickness tested in accordance with ASTM D 3577
- 4. Protein content tested in accordance with EN455-3 using ASTM D 5712







# Protexis<sup>™</sup> Latex with Neu-Thera<sup>™</sup> Surgical Gloves

- Designed to protect in a broad range of cases
- Same great engineering as our Protexis<sup>™</sup>
   Latex Surgical Gloves with our patented
   Neu-Thera<sup>™</sup> Coating

#### **(** What is Neu-Thera<sup>™</sup> Coating?<sup>2</sup>

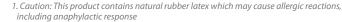
We place moisturizing Neu-Thera<sup>™</sup> Coating on the inside of Protexis<sup>™</sup> Latex with Neu-Thera<sup>™</sup> Surgical Gloves to **help promote overall skin wellness and support hand health.** It provides relief of dry, flaky skin and minimizes skin shedding.

Catalog	Size	Longith		Thickness <sup>3</sup>		Material	Color	Cuff	Protein	Qty/	Qty/
no.	Size	Length	Finger	Palm	Cuff	Materiai	Color	type	content⁴	bx	CS
2D73TP55	5.5										
2D73TP60	6	281mm				Natural rubber					
2D73TP65	6.5					latex with			Less than		
2D73TP70	7		0.25	0.20	0.10	nitrile		Beaded/	50	F0	200
2D73TP75	7.5		0.25mm	0.20mm	0.19mm	polymer and	Limbe	Rolled	micrograms/	50	200
2D73TP80	8	293mm				Neu-Thera™	Light brown		gram		
2D73TP85	8.5					Emollient Coating	DIOWII				20/1
2D73TP90	9								A. C. C.	A STAN	



See Appendix page 29 for complete testing standards





<sup>2.</sup> Data on file



<sup>3.</sup> Thickness tested in accordance with ASTM D 3577

<sup>4.</sup> Protein content tested in accordance with EN455-3 using ASTM D 5712





# Protexis<sup>™</sup> Latex Essential Surgical Gloves

- Versatile glove to be used in a wide variety of surgical environments
- Excellent choice as an outer glove when double-gloving
- Thinner 20% than Protexis™ Latex Surgical Gloves for enhanced tactile sensitivity

Catalog	c:	Longeth		Thickness <sup>2</sup>		Matarial	Calan	Cuff	Protein	Qty/	Qty/
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	content <sup>3</sup>	bx	cs
2D72LE55	5.5										
2D72LE60	6	280mm									
2D72LE65	6.5					Natural rubber			Less than		
2D72LE70	7		0.10	0.21	0.16mm	latex with		Beaded/	50	F0	200
2D72LE75	7.5		0.19mm	0.21mm	0.16mm	nitrile		Rolled	micrograms/	50	200
2D72LE80	8	292mm				polymer coating	Cream		gram		
2D72LE85	8.5										45.5
2D72LE90	9										



See Appendix page 29 for complete testing standards





Caution: This product contains natural rubber latex which may cause allergic reactions, including anaphylactic response

<sup>2.</sup> Thickness tested in accordance with ASTM D 3577

<sup>3.</sup> Protein content tested in accordance with EN455-3 using ASTM D 5712





# Protexis<sup>™</sup> Latex Blue with Neu-Thera<sup>™</sup> Surgical Gloves

- · Good underglove solution 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<sup>™</sup> Coating?<sup>2</sup>

We place moisturizing Neu-Thera™ Coating on the inside of Protexis™ PI Latex Blue with Neu-Thera™ Surgical Gloves to **help promote overall skin wellness and support hand health.** It provides relief of dry, flaky skin and minimizes skin shedding.

Catalog	Size	l au with		Thickness <sup>:</sup>	:	Material	Color	Cuff	Protein	Qty/	Qty/
no.	Size	Length	Finger	Palm	Cuff	Materiai	Color	type	content⁴	bx	cs
2D72LU55	5.5					Natural					
2D72LU60	6	282mm				rubber					
2D72LU65	6.5					latex with nitrile			Less than		
2D72LU70	7		0.19mm	0.14mm	0.14mm	polymer		Beaded/	50	50	200
2D72LU75	7.5		0.1911111	0.14111111	0.14111111	and		Rolled	micrograms/	30	200
2D72LU80	8	295mm				Neu- Thera™	Blue		gram		
2D72LU85	8.5					Emollient				A. 14 . 1 . 1	September 1
2D72LU90	9					Coating					anntex



See Appendix page 29 for complete testing standards



<sup>2.</sup> Data on file



<sup>3.</sup> Thickness tested in accordance with ASTM D 3577

<sup>4.</sup> Protein content tested in accordance with EN455-3 using ASTM D 5712





## Protexis<sup>™</sup> Latex Micro Surgical Gloves

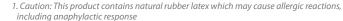
- Stretches and conforms to your hand contour, staying comfortably in place
- Good solution in a thin double-gloving system where fingertip sensation is essential
- 30 percent thinner for enhanced flexibility and tactile sensitivity<sup>2</sup>
- Heightened tactile response with a comfortable, smooth, anti-slip finish

Catalanna	c:	Longith		Thickness	3	Material	Color	Cuff	Protein	Qty/	Qty/
Catalog no.	Size	Length	Finger	Palm Cuff	Material	Color	type	content <sup>4</sup>	bx	CS	
2D72NT55X	5.5										
2D72NT60X	6	282mm									
2D72NT65X	6.5					Natural			Less than		
2D72NT70X	7		0.17mm	0.14 20 20	0.145555	rubber latex with nitrile		Beaded/	50	50	200
2D72NT75X	7.5		0.17111111	0.14111111	0.14111111	polymer	Light	Rolled	micrograms/	50	200
2D72NT80X	8	295mm				coating	brown		gram		
2D72NT85X	8.5										
2D72NT90X	9								in in	· · · · · · · · · · · · · · · · · · ·	Total Control



See Appendix page 29 for complete testing standards





<sup>2.</sup> As compared to Protexis™ Latex Surgical Gloves



<sup>3.</sup> Thickness tested in accordance with ASTM D 3577

<sup>4.</sup> Protein content tested in accordance with EN455-3 using ASTM D 5712





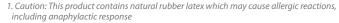
## Protexis<sup>™</sup> Latex Ortho Surgical Gloves

- 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	Ci	l ou with		Thickness <sup>2</sup>		Material	Color	Cuff	Protein	Qty/	Qty/								
no.	Size	Length	Finger	Palm	Cuff	Material	Color	type	content <sup>3</sup>	bx	CS								
2D72LT60	6	202555																	
2D72LT65	6.5	282mm				Natural													
2D72LT70	7	295mm				rubber latex with			Less than										
2D72LT75	7.5		295mm	295mm	295mm	295mm	295mm	295mm	295mm	295mm	0.34mm	0.24mm	0.21mm	water-based		Beaded/ Rolled	50 micrograms/	40	160
2D72LT80	8										295mm				hydrogel polymer	Brown	Honed	gram	
2D72LT85	8.5						coating	D. SWIII				3							
2D72LT90	9																		



See Appendix page 29 for complete testing standards



<sup>2.</sup> Thickness tested in accordance with ASTM D 3577



<sup>3.</sup> Protein content tested in accordance with EN455-3 using ASTM D 5712

#### Environmental stewardship

Protexis™ Surgical Gloves 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 was the first surgical gloves manufacturer to launch **sustainable half-fold packaging** 



Cardinal Health™ Protexis™ Surgical Gloves
Testing standards and technical data



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















PROPERTIES (BEFORE AGING)	Protexis™ PI	Protexis™ PI Protexis™ PI Blue with Neu Thera™ with Neu Thera™		Protexis™ PI Micro	Protexis™ Pl Micro Protexis™ Pl Orthopaedic					
Force at break	19N¹	19N¹	19N¹	17N¹	29N¹	26N¹				
Elongation at break (elasticity) (min)	650%²	650%²	650%²	650%²	650%²	650%²				
Puncture resistance (cuff) (min)	5N <sup>3</sup> 5N <sup>3</sup>		5N <sup>3</sup>	5N <sup>3</sup>	5N <sup>3</sup>	5N <sup>3</sup>				
Freedom from holes	0.65 AQL <sup>4</sup>	0.65 AQL <sup>4</sup>	0.65 AQL <sup>4</sup>	0.65 AQL <sup>4</sup>	0.65 AQL <sup>4</sup>	0.65 AQL <sup>4</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







PROPERTIES (BEFORE AGING)	Protexis™ Neoprene	Protexis™ Neoprene Essential
Force at break	11N¹	13N¹
Elongation at break (elasticity) (min)	650%²	650%²
Puncture resistance (cuff) (min)	5N³	_
Freedom from holes	0.65 AQL⁴	0.65 AQL <sup>4</sup>
Sterilization	Gamma radiation	Gamma radiation
Accelerant	ZDBC (Zinc Dibutyldithiocarbamate)	Not made with traditional chemical accelerators

- 1. Force at break tested in accordance with EN455-2
- 2. Elongation at break tested in accordance with ASTM D 3577
- 3. Puncture resistance (cuff) tested in accordance with AS/NZS 4179
- 4. Freedom from holes test in accordance with EN455-1

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					Market Control of the				
PROPERTIES (BEFORE AGING)	Protexis™ Latex	Protexis™ Latex with Neu <sup>-</sup> Thera™	Protexis™ Latex Essential	Protexis™ Latex Blue with Neu Thera™	Protexis™ Latex Micro	Protexis™ Latex Ortho			
Force at break	20N¹	19N¹	17N¹	18N¹	17N <sup>1</sup>	34N <sup>1</sup>			
Elongation at break (elasticity) (min)	750%²	650%²	750%²	750%²	750%²	750%²			
Puncture resistance (cuff) (min)	5N³	5N <sup>3</sup>	9N <sup>3</sup>	5N <sup>3</sup>	5N <sup>3</sup>	5N³			
Freedom from holes	0.65 AQL <sup>4</sup>	0.65 AQL⁴	0.65 AQL⁴	0.65 AQL⁴	0.65 AQL <sup>4</sup>	0.65 AQL <sup>4</sup>			
Sterilization	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation	Gamma radiation			
Accelerant	ZDBC (Zinc Dibutyldithiocarbamate)								

- 1. Force at break tested in accordance with EN455-2 2. Elongation at break tested in accordance with ASTM D 3577
- 3. Puncture resistance (cuff) tested in accordance with AS/NZS 4179
- 4. Freedom from holes test in accordance with EN455-1
- 5. Caution: This product contains natural rubber latex which may cause allergic reactions, including anaphylactic response



## Chemotherapy agent permeation testing

			Minimum breakth	rough detection t	ime in minutes (0.01	I μg/cm2/minute)¹		
Agent	Protexis™ PI	Protexis™ PI Micro	Protexis™ Neoprene	Protexis™ Neoprene Essential	Protexis™ Latex	Protexis™ Latex Micro	Protexis™ Latex with Neu-Thera™	Protexis™ Latex Essential
Carmustine (3.3 mg/mL)	15.26 (Do Not Use)	15.5 (Do Not Use)	31.1 (Do Not Use)	60.1	15.2 (Do Not Use)	12.5 (Do Not Use)	15.0 (Do Not Use)	23.0 (Do Not Use)
Cisplatin (1.0 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240
Cyclophosphamide (20 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240
Doxorubicin HCL (2.0 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240
Etoposide (20 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240
Fluorouracil (50 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240
Ifosfamide (50 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240
Methotrexate (25 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240
Mitomycin C (0.5 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240
Mitoxantrone (2.0 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240
Paclitaxel (6.0 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240
Thiotepa (10 mg/mL)	16.04 (Do Not Use)	15.7 (Do Not Use)	76.0	110.5	16.3 (Do Not Use)	22.9 (Do Not Use)	20.5 (Do Not Use)	>240
Vincristine Sulfate (1.0 mg/mL)	>240	>240	>240	>240	>240	>240	>240	>240



When chemotherapy drugs are present, glove selection should be based on the specific type(s) of chemicals used. Users must refer to the instructions for use supplied with the box, 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."



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#### 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 (data on file)

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



Protexis™ Surgical Gloves

## Non-latex polyisoprene



	Catalanna	C:	Lanuah		Thickness*		Material	Calan	C. II .	Chamilton Larradoward	Qty/	Qty
	Catalog no.	Size	Length	Finger	Palm	Cuff	Coating in red	Color	Cuff type	Chemical accelerant	bx	CS
	2D72PT55X	5.5										
	2D72PT60X	6	287mm									
	2D72PT65X	6.5										
PROTEXIS	2D72PT70X 2D72PT75X 2D72PT80X	7		0.23mm	0.17	Synthetic	/		Beaded/	1. 1, 3-Diphenylguanidine (DPG)	50	200
	2D72PT75X	7.5		0.23mm	0.17mm	0.17mm	polyisoprene (PI)	_	Rolled	Zinc Diethyldithiocarbamate (ZDEC)     Zinc-2-mercaptobenzothiazole (ZMBT)	50	200
PROTEXIS	2D72PT80X	8	300mm					Cream				
PROTEXIS 9 SE SECTIONS Contact 100	2D72PT85X	8.5										
	2D72PT90X	9										
	2D73TE55	5.5					Synthetic polyisoprene			1. 1, 3-Diphenylguanidine (DPG)     2. Zinc Diethyldithiocarbamate (ZDEC)     3. Zinc-2-mercaptobenzothiazole (ZMBT)		
	2D73TE60	6	287mm								50	
Protexis" PI	2D73TE65	6.5			0.25mm							200
	2D73TE70	7		0.23mm		0.17mm	(PI) with		Beaded/			
Protexis	2D73TE75	7.5		0.23mm		0.17mm	Neu-Thera™ Emollient Coating	Cream	Rolled			
PROTEXIS* SVa)	£ 2D73TE80	8	300mm									
PROTEKIS*  (5'1)  Rich New Dietry 1  Richterman  Contactum  Contac	2D73TE85	8.5										
	2D73TE90	9										
	2D73EB55	5.5										
<u> </u>	2D73EB60	6	287mm									
BLUTTE	2D73EB65	6.5					Synthetic polyisoprene					
PROTEXIS E	2D73EB70	7		0.20mm	0.14mm	0.14	(PI) with		Beaded/	1. 1, 3-Diphenylguanidine (DPG)	50	200
Protexis*** PI Blue with Neu-Thera**	2D73EB75	7.5		0.20mm	0.14mm	0.14mm	Neu-Thera™		Rolled	Zinc Diethyldithiocarbamate (ZDEC)     Zinc-2-mercaptobenzothiazole (ZMBT)	50	200
PROTEXIS* If these with New Designs  9	€ 2D73EB80	8	300mm				Emollient Coating	Blue		,		
Colonia De	2D73EB85	8.5					Coating					
	2D73EB90	9										

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



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## Non-latex polyisoprene



		Catalog no.	Size	Longith		Thickness*		Material	Color	Culf turns	Chemical accelerant	Qty/	Qty/
		Catalog no.	Size	Length	Finger	Palm	Cuff	Coating in red	Color	Cuff type	Chemical accelerant	bx	CS
		2D73PM55	5.5										
	cro	2D73PM60	6	287mm									
	Mic	2D73PM65	6.5										
PROTEIC	<u>a</u>	2D73PM70	7		0.20mm	0.14mm	0.14mm	Synthetic polyisoprene (PI)		Beaded/ Rolled	1. 1, 3-Diphenylguanidine (DPG) 2. Zinc Diethyldithiocarbamate (ZDEC)	50	200
	xis	2D73PM75	7.5		0.20mm 0.1	0.14111111	0.14111111				3. Zinc-2-mercaptobenzothiazole (ZMBT)	30	200
PROTEXIS*	Protexis	2D73PM80	8	300mm					Cream				
Colonia III III	<u>-</u>	2D73PM85	8.5										
		2D73PM90	9										
		2D73HT60	6	291mm									
S-m PI	<del>,</del> .⊻	2D73HT65	6.5	27111111			m 0.21mm	Synthetic polyisoprene	Beaded/ Rolled Brown				
	s™ F aed	2D73HT70	7					(PI) with			1. 1, 3-Diphenylguanidine (DPG)     2. Zinc Diethyldithiocarbamate (ZDEC)     3. Zinc-2-mercaptobenzothiazole (ZMBT)	160	200
SURGICAL GLOVES PORTHOPAEDIC	texi nop	2D73HT75	7.5		0.34mm	0.26mm							
Top of the state o	Protexis <sup>™</sup> Orthopae	2D73HT80	8	305mm									
9 7 40H 9 m	_ ~	2D73HT85	8.5										
•		2D73HT90	9										
	•	2D73ET60	6	292mm									
	Ortho	2D73ET65	6.5										
NOTEX O	PIO	2D73ET70	7					Synthetic		Beaded/	1. 1, 3-Diphenylguanidine (DPG)		
10 mg		2D73ET75	7.5		0.30mm	0.21mm	0.19mm	polyisoprene		Rolled	2. Zinc Diethyldithiocarbamate (ZDEC)	40	160
PROTEVE	Protexis™	2D73ET80	8	305mm				(PI)	Cream		3. Zinc-2-mercaptobenzothiazole (ZMBT)		
Home Secretary	Pro	2D73ET85	8.5						Cream				
		2D73ET90	9										

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



## Non-latex neoprene



	Catalog no	Size	Length		Thickness*		Material	Color	Cuff type	Chemical accelerant	Qty/	Qty/
	Catalog no.  2D73DP55  2D73DP60  2D73DP65  2D73DP70  2D73DP75  2D73DP80  2D73DP85  2D73DP85  2D73DP80  2D73DP85  2D73DP80  2D73DS55  2D73DS60  2D73DS65	JIZE	Length	Finger	Palm	Cuff	Coating in red	Color	Cuil type	Chemical accelerant	bx	CS
	2D73DP55	5.5										
ene	2D73DP60	6	280mm						Beaded/ Rolled			
Did o	2D73DP65	6.5					Synthetic	oprene h nitrile				
Negative Negative	2D73DP70	7	296mm	0.17mm	0.14mm	0.14mm	neoprene			Zinc Dibutyldithiocarbamate (ZDBC)	50	200
i.si	2D73DP75	7.5		0.17111111	0.14mm	0.14111111	with nitrile				30	200
Protexis*** Neoprene	2D73DP80	8					polymer					
	2D73DP85	8.5										
	2D73DP90	9										
	2D73DS55	5.5										
ene	2D73DS60	6	281mm									
opposite the state of the state	2D73DS65	6.5					Synthetic					
SURGICAL CLA	2D73DS70	7		0.17mm	≥ 0.14mm	≥ 0.14 mm	neoprene		Beaded/	Not made with traditional	50	200
Protexis***	2D73DS75	7.5		0.17111111	2 0.14111111	2 0.14 111111	with nitrile	Limba	Rolled	chemical accelerators	30	200
	2D73DS80	8	295mm				polymer	Light Brown				
	2D73DS85	8.5						BIOWII				
	2D73DS90	9										

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



#### Latex



		Catalana	c:	Land	Thickness*		Material	aterial Color		Protein	Chemical	Qty/	Qty/	
		Catalog no.	Size	Length	Finger	Palm	Cuff	Coating in red	Color	Cuff type	content	accelerant	bx	CS
		2D72NS55X	5.5											
	×	2D72NS60X	6	282mm										
200	Latex	2D72NS65X	6.5			5mm 0.20mm 0.19mm		Natural rubber			Less than			
PROTEGUE	T	2D72NS70X	7		0.35mm		latex	Beaded/	Beaded/	50	Zinc Dibutyldithio-	50	200	
1	Protexis™	2D72NS75X	7.5	295mm	0.2311111		with nitrile		Rolled	micrograms/	carbamate (ZDBC)	30	200	
PROTEXIS	rote	2D72NS80X	8					polymer	Light		gram			
2, 663	₫	2D72NS85X	8.5						Brown					
		2D72NS90X	9											
		2D73TP55	5.5											
	e v F v	2D73TP60	6	281mm				Natural rubber					,	
Protexis " Latex with Neu-Thera "	2D73TP65	6.5					latex			Less than	7: 5:		200	
	2D73TP70	7		0.25mm	0.20mm	0.10	with nitrile polymer and		Beaded/	50	Zinc Dibutyldithio- carbamate (ZDBC)	50		
	exis Neu	2D73TP75	7.5		0.25mm	0.20mm	0.19mm	Neu-Thera™ Emollient Coating	Light Brown	Rolled	micrograms/ gram	Carbaniate (2DBC)	50	200
PROTEXIS  Later softs New York	th C	2D73TP80	8	293mm										
Telephone To St. 1923	₫.≧	2D73TP85	8.5				.							
		2D73TP90	9											
		2D72LE55	5.5											
	×	2D72LE60	6	280mm										
	al al	2D72LE65	6.5					Natural rubber			Less than	7. 6.1		
OKO TELO	s™ L nti	2D72LE70	7		0.19mm	0.21mm	0.16mm	latex		Beaded/	50	Zinc Dibutyldithio- carbamate (ZDBC)	50	200
Protexis <sup>m</sup> Latex Essential	2D72LE75	7.5		0.1911111	0.2111111	0.10111111	with nitrile		Rolled	micrograms/	Carbaniate (ZDBC)	30	200	
	2D72LE80	8	292mm				polymer	Cream		gram				
30 -2	Δ	2D72LE85	8.5						Cream					
		2D72LE90	9											

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



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#### Latex



	Catalog no.	Size	Length	Thickness*			Material	Color	Cuff type	Protein	Chemical	Qty/	Qty/
	Catalog no.	Size	Length	Finger	Palm	Cuff	Coating in red	Color	Cuii type	content	accelerant	bx	CS
Protexis** Latex Blue with Neu-Thera***	2D72LU55	5.5	282mm			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	295mm	0.19mm	0.14mm								
	2D72LU75	7.5											
	2D72LU80	8											
	2D72LU85	8.5											
	2D72LU90	9											
Protexis''' Latex Micro	2D72NT55X	5.5	282mm	0.17mm	0.14mm	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	295mm										
	2D72NT75X	7.5											
	2D72NT80X	8											
Prot	2D72NT85X	8.5											
_	2D72NT90X	9											
Rrotexis*** Latex Ortho	2D72LT60	6	282mm	0.34mm	0.24mm	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	295mm										
	2D72LT75	7.5											
Ci S <sup>TM</sup>	2D72LT80	8											
7 0H 28 €	2D72LT85	8.5											
Pro	2D72LT90	9											

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



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For healthcare professionals only

Important information: Prior to use, refer to the instructions on the dispenser box supplied with this device for indications, contraindications, side effects, suggested procedure, warnings and precautions. As part of its continuous product development policy, Cardinal Health reserves the right to change product specifications without prior notification.

Please contact your Cardinal Health representative for additional product availability information.

Not for distribution in the United States.

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