

## Esteem® *Stretchy* Premium Latex-Free Exam Gloves

**For additional information, please contact your Cardinal Health, Glove Products sales representative or call customer service at 1.800.964.5227 or visit our website at [www.cardinal.com/gloves](http://www.cardinal.com/gloves).**

© Copyright 2003. Cardinal Health, Inc. or one of its subsidiaries.  
All rights reserved.  
Lit. No. GLV01190 (0603/2M)

♻️ Printed on recycled paper with 10% post-consumer fiber.

Cardinal Health  
Glove Products  
1500 Waukegan Road  
McGaw Park, IL 60085

[www.cardinal.com/gloves](http://www.cardinal.com/gloves)



# Going the extra distance™

**Esteem® *Stretchy* Premium Latex-Free Exam Gloves**





## Above and beyond the call of duty

At Cardinal Health, we share your dedication to going beyond what's expected. And when we set out to develop a premium line of latex-free exam gloves, we knew you would expect nothing but the best – a glove that works as hard as you do and is every bit as dependable. That's why we created Esteem® premium latex-free exam gloves.

***The leader by a long stretch™***

- **Exclusive “stretchy” latex-free, powder-free formulations**

First gloves in the industry to offer this soft and stretchy material that performs like latex

Superior fit and comfort

Tested against many harsh chemicals and chemotherapy drugs

- **Consistently meets FDA quality standard for surgical gloves**

- **Extensively tested for quality and performance**

- **Available in six sizes**

## Stretching the boundaries of comfort

So what does it mean when we say we're the first to offer such a "stretchy" material in a glove? It means you'll get a glove that offers all the protection of a synthetic while delivering latex-like comfort and flexibility.

Nitrile has always provided an excellent barrier and superior resistance to chemicals, but nitrile gloves have traditionally been stiff and uncomfortable. Clinicians had to sacrifice comfort to get protection. Not anymore.

Esteem® *Stretchy Nitrile* exam gloves are made from the first materials to achieve this balance of comfort and strength. They're soft and flexible, they don easily and feel natural while in use, but they also provide the high level of protection you need in demanding clinical situations.

## Choosing the right protection

- **Esteem® *Stretchy Nitrile***  
*(Finger Textured and Microtextured)*

Made of nitrile material, both gloves are for situations with high risk and greater exposure to blood or body fluids, or for use with chemotherapy agents and harsh chemicals.

- **Esteem® XP**

Made of nitrile material, Esteem® XP provides an additional 2" of material at the cuff for greater coverage when additional protection from fluids is needed.

- **Esteem® *Stretchy Synthetic***

Esteem® *Stretchy Synthetic* is for short-term use (<15 minutes) where there is minimal stress, low risk and low exposure to blood or other potentially infectious materials.



*Added stretch means added comfort when donning and wearing*

## Nitrile – the new standard of protection

- No concerns about latex allergies
- No DEHP as in vinyl gloves
- No concerns about use with alcohol

Latex allergies are often a consideration in the decision to switch to latex-free medical gloves. While latex-free medical gloves may be more expensive than their natural latex counterparts, the direct and indirect costs of managing latex allergies need to be factored into the overall assessment, along with the cost savings due to improved standardization and glove utilization.

Your Cardinal Health representative can help you assess your total costs of managing latex allergies so you can better understand the financial and clinical implications of this important decision.

**Ask for a copy of *The Synthetic Value Model: Making the Switch to Synthetic Medical Gloves* today.**

## Meets the quality standard for surgical gloves

All gloves must meet a certain Acceptable Quality Level (AQL) as established by the Food and Drug Administration (FDA). This refers to their freedom from holes and their subsequent level of barrier protection. That is, **gloves with a lower actual AQL will have fewer barrier defects.**

<b>FDA maximum AQL for exam gloves</b>	<b>4.0</b>
<b>American Society for Testing and Materials (ASTM) maximum</b>	<b>2.5</b>
<b>FDA maximum for surgical gloves</b>	<b>1.5</b>
<b>Esteem® Latex-Free Exam Gloves</b>	<b>1.5</b>

*We go the extra distance with our testing because the **safety of clinicians and patients is a top priority.** You expect a certain level of protection when you put on an exam glove. **We ensure you're getting that protection – and more.***



*A higher quality standard corresponds with a lower failure rate during actual use*



## Superior comfort and performance

*You'll notice the difference the first time you try them on. Esteem® latex-free exam gloves fit like latex and stretch like latex. The result is a glove that fits your hand like it was custom made for you, delivering exceptional freedom of movement and tactile sensitivity.*

- 1 Stretchy material** — Esteem® latex-free gloves feature a unique, stretchy formulation that conforms to your hand quickly. The soft, flexible material facilitates a range-of-motion, especially around the thumb area.
- 2 Choice of texture** — Esteem® *Stretchy Nitrile* gloves are available with textured fingers or with our microtextured finish for a sure grip.
- 3 Powder-free** — All Esteem® latex-free gloves are powder-free. The stretchy nitrile material has a naturally low coefficient of friction, making them all easy to don. Esteem® latex-free gloves meet or exceed the requirements for a powder-free glove per ASTM D6319 Standard Specification for Nitrile Examination Gloves for Medical Application.
- 4 XP version** — When additional protection is needed, Esteem XP nitrile gloves offer a 2" longer cuff for increased coverage.
- 5 Available in six sizes** — Now everyone on your staff can get the benefit of a well-fitting glove. Esteem® is the first line to offer a nitrile glove in six sizes ranging from XS to XXL.
- 6 Extensively tested** — Tested for use with many harsh chemicals and chemotherapy agents.

# Proven performance

To be considered truly reliable, exam gloves should provide consistent performance in the kind of environments in which you work. Not all manufacturers go through the time and expense required to thoroughly test their gloves the way we do. We go the extra distance and subject Esteem® latex-free exam gloves to an exhaustive series of tests to measure their barrier integrity.

All Esteem® Stretchy Nitrile Gloves feature textured fingers or a microtextured surface for a sure grip



## Information for Non-Medical Uses

### Common Hospital and Laboratory Chemicals

Working with harsh chemicals can degrade a glove's performance. Esteem® latex-free exam gloves are tested according to ASTM F739 Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases Under Condition of Continuous Contact. (Results are average normalized breakthrough times in minutes.)

<b>Acrylamide 50%</b>	<b>240</b>
<b>Glutaraldehyde 2.4%</b>	<b>&gt;480</b>
<b>Sodium Hydroxide 50%</b>	<b>&gt;480</b>
<b>Sodium Hypochlorite 10%-13%</b>	<b>&gt;480</b>

### Chemotherapy Agents — Esteem® Stretchy Nitrile

(both textured and microtextured) and XP gloves are additionally tested per ASTM F739 for use with chemotherapy drugs, which can be especially damaging to a glove or cause a glove failure.

<b>Cisplatin (1.0 mg/mL)</b>	<b>&gt;480</b>
<b>Cyclophosphamide (20 mg/mL)</b>	<b>&gt;480</b>
<b>Dacarbazine (10.0 mg/mL)</b>	<b>&gt;480</b>
<b>Doxorubicin Hydrochloride (2.0 mg/mL)</b>	<b>&gt;480</b>
<b>Etoposide (1.0 mg/mL)</b>	<b>&gt;480</b>
<b>Fluorouracil (50 mg/mL)</b>	<b>&gt;480</b>
<b>Ifosfamide (1.0 mg/mL)</b>	<b>&gt;480</b>
<b>Mitoxantrone (1.0 mg/mL)</b>	<b>&gt;480</b>
<b>Paclitaxel (6.0 mg/mL)</b>	<b>&gt;480</b>
<b>Thiotepa (1.0 mg/mL)</b>	<b>&gt;480</b>
<b>Vincristine (1.0 mg/mL)</b>	<b>&gt;480</b>
<b>Carmustine (3.3 mg/mL)</b>	<b>30</b>

# Going the extra distance™

*Esteem® Stretchy Synthetic gloves are a great choice for low-risk situations*



**Bacteriophage Penetration Test** — The risk of exposure to bloodborne pathogens in the clinical workplace is significant.

ASTM F1671 is the Standard Test Method for Resistance of Materials Used in Protective Clothing to Penetration by Bloodborne Pathogens Using Phi-x174 Bacteriophage Penetration as a Test System. **All Esteem® latex-free gloves pass this test.**

Microorganism	Average Size
Phi-x174 bacteriophage	25-30 nm

When we perform ASTM F1671 testing, we use a significant sample that is 10 times what's required (32 gloves versus three).

	ASTM Standard	FDA Required	Cardinal Tests
<b>Barrier Protection</b>			
AQL (pinhole testing)	X	X	Yes
Puncture resistance	No	No	Yes
Chemical resistance	X	No	Yes
Bacteriophage penetration	X	No	Yes
Aging/shelf life (accelerated)	X	X	Yes
Chemotherapy resistance	X	No	Yes
<b>Allergy/Irritation Related</b>			
Protein (for label claim)	X	X	Yes
Powder levels (powder-free claim)	X	X	Yes
Allergen levels	No	No	Yes
Residual accelerators	No	No	Yes
Irritation potential	No	No	Yes
Endotoxin	No	No	Yes
<b>Strength</b>			
Tensile	X	X	Yes
Material thickness	X	X	Yes
Elongation/stretchiness	X	X	Yes
V-tear	X	No	Yes
Trouser tear	X	No	Yes



*You get comfort, precision and protection with Esteem® exam gloves*

	<b>Esteem® Stretchy Nitrile (textured)</b>	<b>Esteem® Stretchy Nitrile (microtextured)</b>	<b>Esteem® XP</b>	<b>Esteem® Stretchy Synthetic</b>				
<b>Chemotherapy Agents</b>								
<b>Carmustine</b>	63	63	30	—				
<b>Cisplatin</b> (1.0 mg/mL)	>480	>480	>480	—				
<b>Cyclophosphamide</b> (20 mg/mL)	>480	>480	>480	—				
<b>Dacarbazine</b> (10.0 mg/mL)	>480	>480	>480	—				
<b>Doxorubicin Hydrochloride</b> (2.0 mg/mL)	>480	>480	>480	—				
<b>Etoposide</b> (1.0 mg/mL)	>480	>480	>480	—				
<b>Fluorouracil</b> (50 mg/mL)	>480	>480	>480	—				
<b>Ifosfamide</b> (1.0 mg/mL)	>480	>480	>480	—				
<b>Mitoxantrone</b> (1.0 mg/mL)	>480	>480	>480	—				
<b>Paclitaxel</b> (6.0 mg/mL)	>480	>480	>480	—				
<b>Thiotepa</b> (1.0 mg/mL)	>480	>480	>480	—				
<b>Vincristine</b> (1.0 mg/mL)	>480	>480	>480	—				
<b>Information for Non-Medical Uses, Common Hospital and Laboratory Chemicals</b>								
<b>Acrylamide 50%</b> (Nitrile)	>480	>480	240	—				
<b>Glutaraldehyde 2.4%</b>	>480	>480	>480	>480				
<b>Sodium Hydroxide 50%</b>	>480	>480	>480	>480				
<b>Sodium Hypochlorite 10%-13%</b>	>480	>480	>480	>480				
<b>Germicidal Cleaning Solution — Organic Chlorides</b>	>480	>480	120	>480				
<b>Length and Thickness</b>								
<b>Average Length</b> (mm)	236	246	300	347				
<b>Cuff Thickness</b> (mil/mm)	3.9/.10	3.5/.09	10.4/.26	3.8/.10				
<b>Palm Thickness</b> (mil/mm)	4.7/.12	4.5/.12	11.5/.29	4.8/.12				
<b>Finger Thickness</b> (mil/mm)	6.8/.17	5.0/.13	11.9/.30	8.7/.22				
<b>Physical Properties</b>								
<b>ASTM Limit</b>								
Tensile Strength	2031 psi/14 MPa	2031 psi/14 MPa	≥2031 psi/≥14 MPa	≥1305 psi/≥9 MPa				
Ultimate Elongation	≥500%	≥500%	≥500%	≥300%				
<b>Cardinal Health Actual</b>								
Tensile Strength	3916 psi/27 MPa	3771 psi	2466 psi/17 MPa	1514 psi/10 MPa				
Tensile Stress @ 300%	1030 psi	609 psi	400 psi	—				
Ultimate Elongation	537%	578%	648%	380%				
<b>AQL</b>	1.5	1.5	1.5	1.5				
<b>Ordering Information</b>								
	<b>Cat. No.</b>	<b>Qty/Bx</b>	<b>Cat. No.</b>	<b>Qty/Bx</b>	<b>Cat. No.</b>	<b>Qty/Bx</b>	<b>Cat. No.</b>	<b>Qty/Bx</b>
X-small	8815N	100	8810N	100	N8850XP	50	8880	100
Small	8816N	100	8811N	100	N8851XP	50	8881	100
Medium	8817N	100	8812N	100	N8852XP	50	8882	100
Large	8818N	100	8813N	100	N8853XP	50	8883	100
X-large	8819N	90	8814N	90	N8854XP	50	8884	90
XX-large	8819NXX	90	8814NXX	90	—	—	—	—

**Other Non-Latex Specialty Gloves**

**Sterile latex-free nitrile singles — N8820-N8823**

**Sterile latex-free nitrile pairs — N8830-N8833**

## What it means to go the extra distance



At Cardinal Health, going the extra distance means more than making a premium latex-free exam glove. It means providing the service and support you'd expect from a world leader in the health-care industry.

*Discover the advantage of Esteem® latex-free exam gloves and see why these innovative gloves are... **The leader by a long stretch.™***

