

glove<sup>en</sup>



Nitrile & Latex Powder Free  
Colloidal Oatmeal Coated Gloves



A patented powder free  
glove coating technology  
with all natural  
**Colloidal Oatmeal USP**

# WHAT IS COATS®

COATS is an acronym for Colloidal Oatmeal System. It is a patented glove coating technology which contains a clinically proven skin protectant.

## Colloidal Oatmeal System



### BEYOND PROTECTION

Oatmeal has been used for centuries as a soothing agent to relieve itch and irritation associated with various dry skin conditions. In June 2003, colloidal oatmeal gained the FDA approval to be used as a skin protectant.

Realising the unique benefits of colloidal oatmeal, we at Mun, combined this knowledge with our innovative glove-making technology to offer you GloveOn COATS—the revolutionary glove that goes beyond protection.

## DERMATOLOGICAL BENEFITS OF COLLOIDAL OATMEAL



#### MOISTURISING

Hold moisture in the outermost layer of the skin through occlusive and water-binding properties



#### PROTECTING

Forms a viscous occlusive barrier to protect from external irritants



#### SOOTHING

Relieves inflammation, irritation and itch, which facilitates skin recovery



#### ANTI-OXIDANT

Protects the skin from oxidative damages



#### pH BUFFERING

Preserves the skin's protective barrier function by restoring pH balance



#### CLEANSING

Acts as a natural cleanser by removing dead skin cells



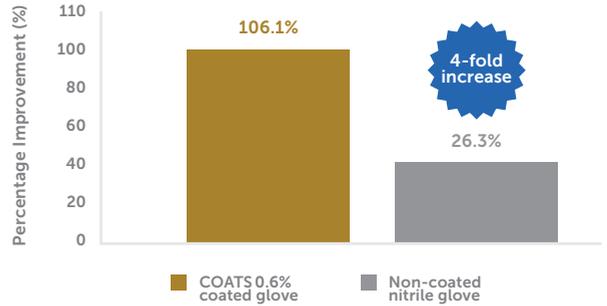
**COATS®** glove is coated  
with **Colloidal Oatmeal** to  
moisturise & protect your skin



# EFFICACY OF GLOVEON COATS® GLOVES

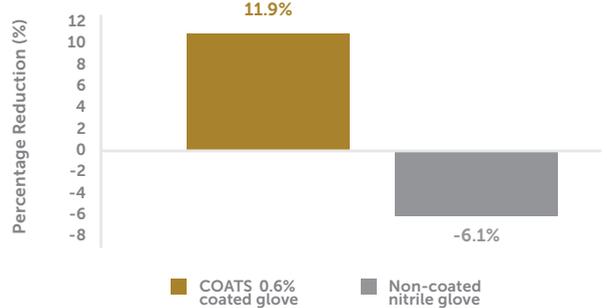
## Improvement in Skin Hydration

- GloveOn COATS gloves demonstrated a 4-fold increase in skin hydration improvement compared to non-coated nitrile gloves, with a remarkable 106.1% improvement from baseline.<sup>[1]</sup>



## Reduction in Water Evaporation

- GloveOn COATS gloves showed a 11.9% reduction in water evaporation as opposed to 6.1% increase in water evaporation observed in non-coated nitrile gloves.<sup>[1]</sup>

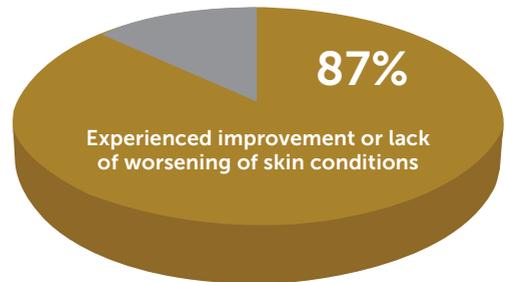


The higher the water loss, the greater the likelihood for skin damage.

## Improvement or Lack of Worsening of Skin Conditions

- 87% of healthcare workers who wore COATS gloves experienced improvement or lack of worsening of skin conditions from baseline.<sup>[2]</sup>

At the beginning of the study, symptoms of mild redness, rash, swelling, and dryness/cracking were reported.





# gloveon COATS

Colloidal Oatmeal System

## Nitrile Exam Gloves Powder Free, Standard Cuff

GloveOn® COATS® (colloidal oatmeal system) is a patented and unique nitrile glove technology, which contains an FDA-recognised skin protectant. These utilise the powerful benefits of all-natural oats as a coating that forms a natural, moisturising barrier between the glove and skin. This acts as a preventative measure against skin irritation and hydration dermatitis. Therefore, users who suffer from dry and itchy skin can now use GloveOn® COATS® to protect their hands while they work.



Physical Dimensions		
Length (mm)	≥ 230	
Palm Thickness (Centre of Palm) (mm)	0.07 ± 0.02	
Finger Thickness (13mm ± 3mm from tip) (mm)	0.09 ± 0.02	
Physical Properties		
	Before Ageing	After Ageing
Tensile Strength (MPa)	≥ 18	≥ 16
Elongation (%)	≥ 500	≥ 400
Performance Requirements		
	Inspection Level	AQL
Watertightness	G1	1.5
Physical Dimensions	S2	4.0
Physical Properties	S2	4.0
Visual Inspection (Major)	S4	2.5
Visual Inspection (Minor)	S4	4.0
Particulate Residue	N = 5	≤ 2mg/glove
Colloidal Oatmeal Content	N = 5	≥ 5mg/glove

### REORDER CODE & PACKAGING

**Regular Pack:**  
 CTS121XS (XS), CTS121SS (S), CTS121MM (M),  
 CTS121LL (L) & CTS121XL (XL)  
 • 200 gloves per box (XS to L)  
 • 180 gloves per box (XL)  
 • 10 boxes per carton

**Handy Pack:**  
 CTS157SS (S), CTS157MM (M) & CTS157LL (L)  
 • 50 gloves per box  
 • 40 boxes per carton

### FEATURES

- Fingertip textured • Powder free
- Not made with natural rubber latex
- Chemo drugs tested
- Lab chemical tested • Ambidextrous
- Standard cuff • Dawn blue colour

### REGULATORY COMPLIANCE

ARTG 407779, FDA 510(k), REACH, EU 2016/425, EU 10/2011, EC 1935/2004, MDR (EU) 2017/745, ROHS DIRECTIVE 2011/65/EU

### STANDARDS

ASTM D6319, ASTM D6124, ASTM D5151, ASTM F1671, ASTM D6978, EN 1186, EN 455 part 1, 2, 3 & 4, CEN/TS 14234, EN ISO 374 part 1 (Type C), 2, 4 & 5, EN 16523-1, EN 13130, EN ISO 21420, EN 421 (excluding Clause 4.3), HACCP International Certified, ISO 10993 part 5 & 10

### PATENTS

Patent US7691436B2, Patent US7740622B2, Patent US8458818B2, Patent US 7718240 B2, Patent US 8075965 B2

### MANUFACTURING ACCREDITATIONS

ISO 9001, ISO 13485, EN ISO 13485

Chemotherapy Drugs and Concentration (Tested for Resistance to Permeation by Chemotherapy Drugs as per ASTM D6978 - Test Report PN 157625)	Minimum Breakthrough Detection Time (minutes)
--	--

Carmustine (BCNU), 3.3mg/ml (3,300 ppm)	24.1 minutes
Cisplatin, 1.0mg/ml (1,000 ppm)	>240 minutes
Cyclophosphamide (Cytosan), 20.0mg/ml (20,000 ppm)	>240 minutes
Dacarbazine (DTIC), 10.0mg/ml (10,000 ppm)	>240 minutes
Doxorubicin Hydrochloride, 2.0mg/ml (2,000 ppm)	>240 minutes
Etoposide (Tospar), 20.00mg/ml (20,000 ppm)	>240 minutes
Fluorouracil, 50.0mg/ml (50,000 ppm)	>240 minutes
Methotrexate, 25.0mg/ml (25,000 ppm)	>240 minutes
Mitomycin C, 0.5mg/ml (500 ppm)	>240 minutes
Paclitaxel (Taxol), 6.0mg/ml (6,000 ppm)	>240 minutes
Thiotepa, 10.0mg/ml (10,000 ppm)	25.2 minutes
Vincristine Sulfate, 1.0mg/ml (1,000 ppm)	>240 minutes

**WARNING:** Carmustine and Thiotepa, at the tested concentration, degraded COATS nitrile glove at 24.1 minutes and 25.2 minutes, respectively. The safe use of gloves in chemotherapy treatment is solely the decision of clinicians authorised to make such decision.

Chemical	EN 16523-1 Permeation Level	EN ISO 374-4 Mean Degradation (%)
K 40% Sodium Hydroxide	6	-67.8
P 30% Hydrogen Peroxide	1	-3.3
T 37% Formaldehyde	4	-27.8

Measured breakthrough time (minutes)	>10	>30	>60	>120	>240	>480
Permeation performance level	1	2	3	4	5	6



# gloveon COATS

Colloidal Oatmeal System

## Latex Exam Gloves Powder Free, Standard Cuff

COATS® (colloidal oatmeal system) is a patented and unique latex glove technology, which contains an FDA-recognised skin protectant. These utilise the powerful benefits of all-natural oats as a coating that forms a natural, moisturising barrier between the glove and skin. This acts as a preventative measure against skin irritation and hydration dermatitis. Therefore, users who suffer from dry and itchy skin can now use GloveOn® COATS® to protect their hands while they work.



### REORDER CODE

CLX711XS	X-SMALL
CLX711SS	SMALL
CLX711MM	MEDIUM
CLX711LL	LARGE
CLX711XL	X-LARGE

### FEATURES

- Fully textured • Powder free
- Protein level  $\leq 50\mu\text{g/g}$
- Made with natural rubber latex
- Lab chemical tested • Ambidextrous
- Standard cuff • Lemon green colour

### PACKAGING

100 gloves per box for XS to XL  
10 boxes per carton

### REGULATORY COMPLIANCE

FDA 510(k), MDR 2017/745, REACH,  
RoHS Directive 2011/65/EU, EU 10/2011,  
EU 2016/425, ARTG 408965, EC 1935/2004

### STANDARDS

ASTM D5151, ASTM D6124, ASTM D3578,  
ASTM D5712, ASTM F1671, EN ISO 21420,  
EN ISO 374 part 1 (Type B), 2, 4 & 5, EN 1186,  
EN 455 part 1, 2, 3 & 4, EN 13130, EN 16523-1,  
CEN/TS 14234, ISO 10993 part 5 & 10,  
HACCP International Certified

### PATENTS

Patent US7691436B2, Patent US7740622B2,  
Patent US8458818B2, Patent US 7718240 B2,  
Patent US 8075965 B2

### MANUFACTURING ACCREDITATIONS

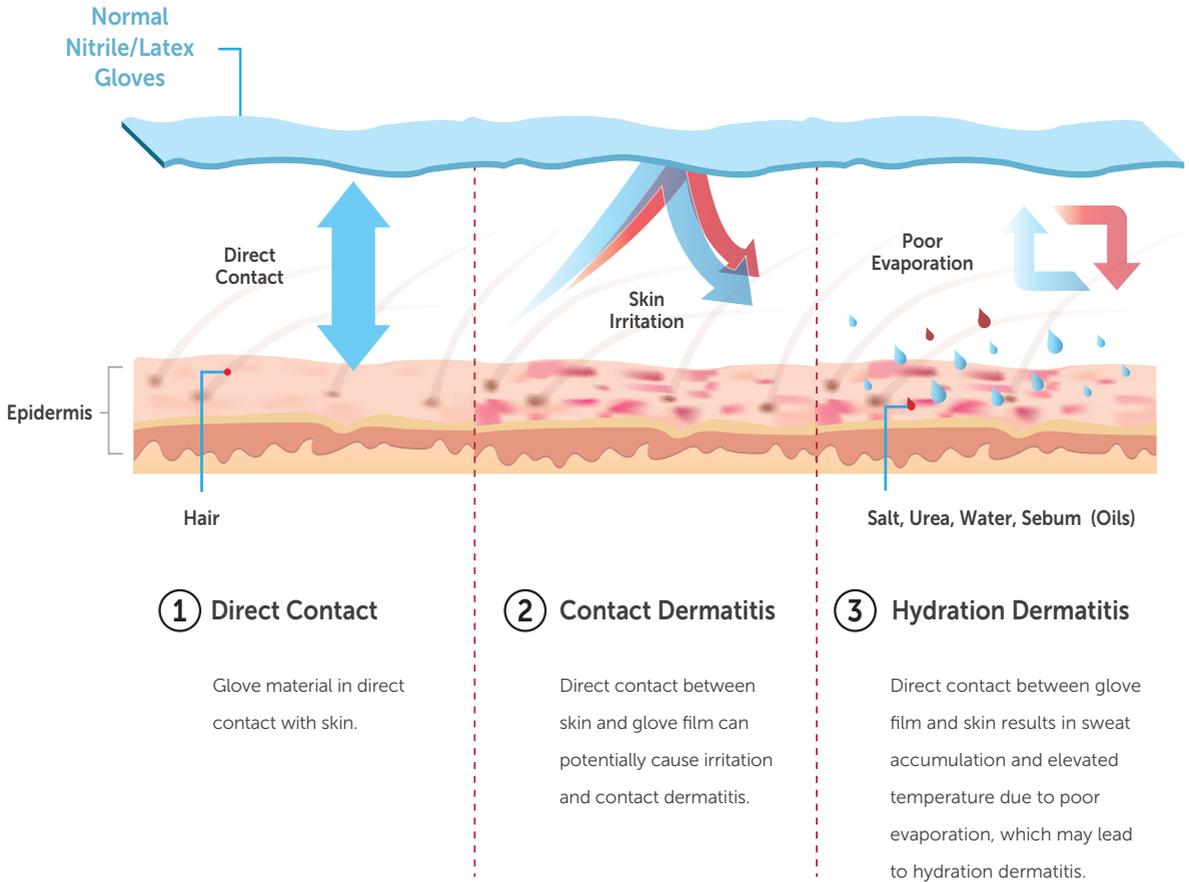
ISO 9001, ISO 13485, EN ISO 13485

Physical Dimensions		
Length (mm)	$\geq 230$	
Palm Thickness (Centre of Palm) (mm)	$0.11 \pm 0.03$	
Finger Thickness (13mm $\pm$ 3mm from tip) (mm)	$0.13 \pm 0.03$	
Physical Properties		
	Before Ageing	After Ageing
Tensile Strength (MPa)	$\geq 18$	$\geq 16$
Elongation (%)	$\geq 650$	$\geq 500$
Performance Requirements		
	Inspection Level	AQL
Watertightness	G1	1.5
Physical Dimensions	S2	4.0
Physical Properties	S2	4.0
Visual Inspection (Major)	S4	2.5
Visual Inspection (Minor)	S4	4.0
Particulate Residue	N = 5	$\leq 2\text{mg/glove}$
Protein Content	N = 3	$\leq 50\mu\text{g/g}$
Colloidal Oatmeal Content	N = 5	$\geq 5\text{mg/glove}$

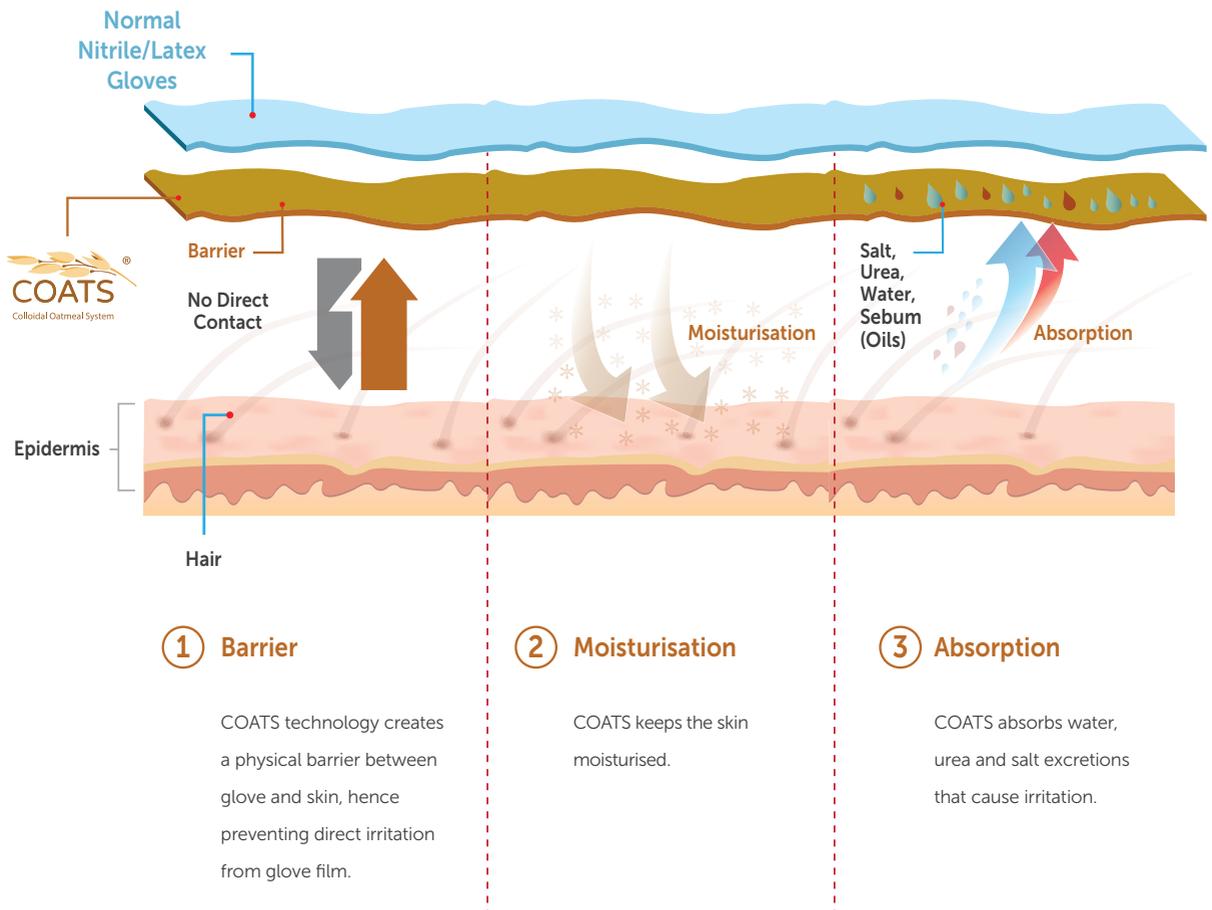
Chemical	EN 16523-1 Permeation Level	EN ISO 374-4 Mean Degradation (%)
K 40% Sodium Hydroxide	3	-15.8
P 30% Hydrogen Peroxide	2	0.0
T 37% Formaldehyde	3	42.5

Measured breakthrough time (minutes)	>10	>30	>60	>120	>240	>480
Permeation performance level	1	2	3	4	5	6

# TYPICAL CONDITIONS WHEN WEARING A NORMAL GLOVE



# HOW GLOVEON COATS® GLOVE WORKS



## FEEL THE DIFFERENCE WITH GLOVEON COATS

**"An excellent glove. Feels like a part of your hand."**

*Godfrey, Registered Nurse, New South Wales*

**"Glove felt great on, hand didn't sweat like other gloves."**

*Laura, Dental Assistant, Queensland*

**"Thanks to GloveOn COATS, my hand condition has improved tremendously!"**

*Zara, Nurse Aide, Kuala Lumpur*

# FAQs



## 1. What are Oats ?

The oat (*avena sativa*) is a cereal grain grown and harvested for its seeds, which are used in a wide variety of products, including food, agriculture, health and skincare products.

## 2. What is Colloidal Oatmeal ?

Colloidal oatmeal, the compound utilised in GloveOn COATS® gloves, is made by milling the oat seeds into a fine powder. Colloidal oatmeal is recognised by the FDA as a skin protectant. GloveOn COATS gloves utilise the unique benefits of colloidal oatmeal by including a coating of colloidal oatmeal inside the glove. GloveOn COATS gloves moisturise your hands while you wear them, replacing moisture stripped from the skin, removing dead skin cells, relieving itch and irritation, repairing damages from other chemicals and calming the skin.

## 3. What is Gluten ?

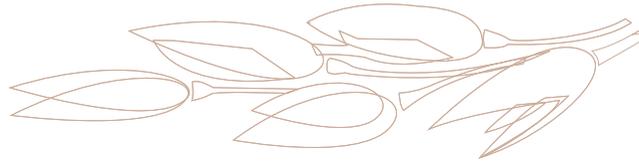
Gluten is a mixture of proteins that occur naturally in wheat, rye, barley and crossbreeds of these grains.<sup>[3]</sup> Gluten can be found in foods containing these ingredients, including bread, pasta, cakes, cereal and various sauces and dressings.<sup>[4]</sup> For most people, gluten is entirely safe to eat, and is a healthy source of protein and fibre. However, for people who suffer from coeliac disease, gluten can cause serious medical problems.<sup>[4]</sup>

## 4. What is Coeliac Disease ?

Coeliac is a medical disease in which the immune system reacts abnormally to gluten, causing small bowel damage. Coeliac disease is a genetic predisposition, meaning people who suffer from the disease are born with genes that may result in the development of gluten intolerance. Coeliac disease is estimated to affect 1% - 2% of the population.<sup>[5]</sup> If undiagnosed, coeliac disease can lead to chronic system inflammation, poor nutrition and malabsorption of nutrients. Coeliac disease cannot be cured, thus people who suffer from this disease must maintain a lifelong gluten-free diet.<sup>[6]</sup>

## 5. Do Oats contain Gluten ?

Oats do not naturally contain gluten. However, due to the demands of the modern agricultural market, oat crops are often grown in close proximity to, or on plots of land previously used to grow, wheat, barley and rye crops, which may lead to cross-contamination.



## 6. I have Coeliac Disease. Can I wear GloveOn COATS® gloves ?

Yes. While minute traces of gluten due to cross-contamination may be in the colloidal oatmeal coating of GloveOn COATS gloves, topical exposure to gluten is completely safe for coeliac sufferers. According to the Centre for Coeliac Research, "...it is the oral ingestion of gluten that activates the immunological cascades leading to the autoimmune process typical of coeliac disease".<sup>[7]</sup> That is, the adverse symptoms associated with coeliac disease occur only when gluten is ingested orally. The presence of gluten in products designed for external use, in particular the application of gluten products to the skin has been deemed safe by the Centre for Coeliac Research.

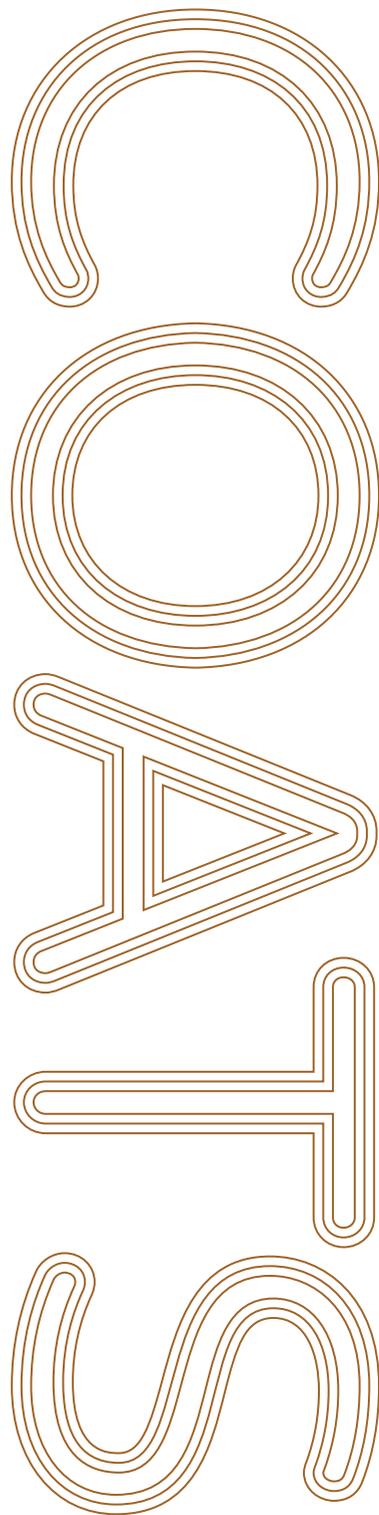
"If you have coeliac disease, then the application of gluten containing products to the skin should not be a problem, unless you have skin lesions that allow gluten to be absorbed systematically in great quantities"

– Dr Alessio Fasano, Medical Director of the Centre for Coeliac Research.<sup>[7]</sup>

In fact, it is generally agreed that gluten molecules are too large to be absorbed through the skin.<sup>[8]</sup> As always, you should practice appropriate hand washing techniques as part of routine hygiene practices when you anticipate contact with potentially infectious people or substances.

### References:

- 1 Aspen Clinical Research Report OATCLI4C. A Clinical Study to Measure the Effects of COATS 0.6% Coating Concentration Blend on the Skin vs 'Non-Coated Nitrile Glove (Control): To Demonstrate the Benefits of this Coating as a Protectant; and the Reparative Role on Damaged Skin. (2014).
- 2 Drower, E., Reyna, R., Wilson, K., Fercho, D., & Schmidt, T. (2016). Evaluation of Colloidal Oatmeal-Coated Exam Gloves on Skin of Healthcare Workers. American Journal of Infection Control, 44.
- 3 US Food and Drug Administration (2014). 'Gluten-Free' now means what is says. Consumer Health Information, August 2014 Bulletin.
- 4 State Government of Victoria (2015). Gluten-free diet. Retrieved from <https://www.betterhealth.vic.gov.au/health/HealthyLiving/gluten-free-diet>
- 5 BioMed Central Ltd. (2013). A novel serogenetic approach determines the community prevalence of celiac disease and informs improved diagnostic pathways. Retrieved from <http://bmcmmedicine.biomedcentral.com/articles/10.1186/1741-7015-11-188>.
- 6 Coeliac Australia (2015). Coeliac Disease. Retrieved from <http://www.coeliac.org.au/coeliac-disease/>.
- 7 Gluten Free Dietitian (2015). Personal Care Products: Do you need to worry about gluten? Retrieved from <http://www.glutenfreedietitian.com/personal-care-products-do-you-need-to-worry-about-gluten/>.
- 8 Howard, D. (2015). A Glutton for Gluten: Should Skin Care be Gluten-Free? Retrieved from <https://education.dermalogica.com.au/Content/docs/AGluttonforGluten.pdf>



**MUN (AUSTRALIA) PTY LTD**

Suite 305, 51 Rawson Street,  
Epping, NSW 2121, Australia.

Tel: +61 2 9868 7708

Toll Free: 1800 456 837 (GLOVES)

Fax: +61 2 9868 7738

Email: [info.au@munglobal.com](mailto:info.au@munglobal.com)

[munglobal.com.au](http://munglobal.com.au)

