

# Medline DermAssure™ Green Surgical Gloves

Made without chemical accelerators and natural rubber latex



**Be sure:  
DermAssure™**

# Issues beyond latex:

## The impact chemical allergies have on your staff

If you, or someone on your surgical staff, have skin issues like red, irritated, cracked and itchy hands, what do you do?

One of your first steps may be to switch to powder-free surgical gloves. But what happens if the problem continues? You may then convert to surgical gloves made without natural rubber latex. But what else could be causing this problem?

This type of skin reaction can be caused by other materials used in glove manufacturing, including a group of chemicals called accelerators, which can cause Type IV allergic reactions.<sup>1</sup>



# What are chemical accelerators?

Chemical accelerators are added to the glove formulation during the manufacturing process to help make them more durable and provide elasticity. Accelerators are used in both latex and synthetic gloves.<sup>2</sup>

## What happens when a Type IV allergic reaction occurs?<sup>3</sup>

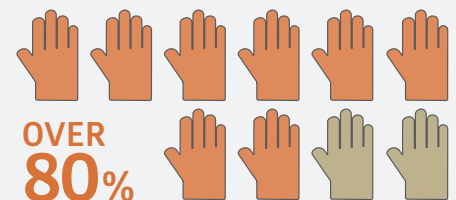
Clinically, a Type IV allergy appears as a red, raised and palpable area at the point of contact with the glove, accompanied by subjective symptoms such as itching, burning and tingling. Additional symptoms include: erythema, swelling, cracking, weeping and dryness of the skin at the site of contact although dermatitis may extend beyond the area of contact.



- The Type IV response begins when the antigens (such as residual chemicals leached from the glove in one's own perspiration) penetrate the skin, triggering the formation of T-cells sensitised to the specific antigens.
- Repeated exposure to the antigen in allergic individuals results in the re-activation of sensitised T-cells and the production of an inflammatory response causing the Type IV symptoms.
- These effects typically appear anywhere from 6 to 48 hours following exposure to the antigen-containing product and can last up to 4 days.
- Allergic contact dermatitis brings an even greater risk of blood-borne pathogen infection because the body's most efficacious barrier—intact skin—becomes compromised.<sup>4</sup>

## Did you know?

While the rates of most other occupational diseases are declining, skin disease rates are actually rising.<sup>5</sup>



of reported glove-associated allergic contact dermatitis is attributed to chemical accelerators.<sup>6</sup>

Contact dermatitis (along with other occupational skin diseases) is the second-most common occupational disease, projects the U.S. Bureau of Labor Statistics.<sup>7</sup> On average, nurses with occupational dermatitis miss six days of work per year,<sup>8</sup> and the average cost to the facility can be several thousand dollars in lost work days.<sup>9</sup>

Studies show that the chemical accelerators and other additives commonly used in the production of nitrile, latex and non-latex gloves can cause allergic contact dermatitis (Type IV allergy).<sup>10</sup> One accelerator that studies have shown to be particularly problematic is diphenyl guanidine (DPG).

In 2019, the Dejonckheere study showed 86 per cent of caregivers suffering from contact dermatitis reacted positively when patch-tested for DPG.<sup>10</sup>

# DermAssure Green:

## A new alternative made without chemical accelerators

First there were powder-free surgical gloves. Then there were surgical gloves made without natural rubber latex. Now there is Medline DermAssure Green—an advanced surgical glove made without natural rubber latex, without powder and without chemical accelerators to enhance performance and promote safety during double gloving.

## Advancing comfort and tactile sensitivity

DermAssure Green is manufactured with a technologically advanced formulation that is made without chemical accelerators, but still provides the outstanding comfort and performance you expect and need.

DermAssure Green is made with next-generation synthetic materials for a soft feel and enhanced tactile sensitivity. The secret to DermAssure's success is a new polychloroprene formulation that provides an enhanced fit and flexibility to reduce hand fatigue and allow for more natural movement compared to current accelerator-free and synthetic gloves.

### The next evolution in surgical gloves



**1947**

First surgical glove to contain powder, natural rubber latex and chemical accelerators<sup>11</sup>



**1983**

First powder-free surgical glove but still containing natural rubber latex and chemical accelerators<sup>12</sup>



**1990s**

First surgical glove made without with powder and natural rubber latex, but still containing accelerators<sup>13</sup>



**2016**

Medline introduces next-generation surgical glove made without powder, natural rubber latex and chemical accelerators

POWDER LATEX ACCELERATORS





### **+ Universal application**

DermAssure is ideal for general surgery as an underglove or by itself, as well as for any surgery where staff members may have chemical accelerator sensitivities.

### **+ Excellent tactile sensitivity**

Durable yet thinner than traditional surgical gloves, DermAssure provides outstanding tactile sensitivity to help maintain manual dexterity throughout a procedure.



### **+ No cuff roll-down**

DermAssure is designed with ARC (anti-roll-down cuff) technology to reduce cuff roll-down common with many surgical gloves.



### **+ Outstanding comfort**

Its new, advanced polychloroprene formulation gives DermAssure flexibility and softness, making it comfortable to wear, even during lengthy procedures. DermAssure is also made with an improved design to enhance comfort.



# Risks of glove perforations

The risk of exposure to pathogens transmitted through blood is one of the main concerns of surgeons and surgical staff. Perforations in surgical gloves, which are often not visible to the human eye, are still usually big enough to allow pathogens to pass from the glove wearer to the patient, causing an infection.



## Over 80%

of all perforations in surgical gloves are not detected.<sup>13</sup>

The longer the gloves are used, the higher the perforation risk becomes.<sup>14</sup>

Glove perforations can lead to the transmission of infectious pathogens.

## Addressing this risk with the double-gloving technique

### Why should you use this technique?

- » Using 2 surgical gloves reduces the risk of accidents involving sharps, which reduces the risk of cross-contamination between the healthcare professional and the patient.
- » Furthermore, this technique helps detect microperforations in the external layer earlier.

### Did you know?

- » The double-gloving method can reduce the risk of blood and bodily fluid exposure by up to 87% if the exterior glove is perforated.<sup>15</sup>
- » In a study on 582 glove wearers who used the double-gloving technique, over  $\frac{3}{4}$  (77%) were able to detect perforations in the glove.<sup>16</sup>

### How do you employ this technique?



1. Don a dark-coloured underglove.

2. Put a light-coloured exterior glove over it to create clear contrast.

3. Easily spot perforations in your glove if they occur.

# Working together as though they were one glove

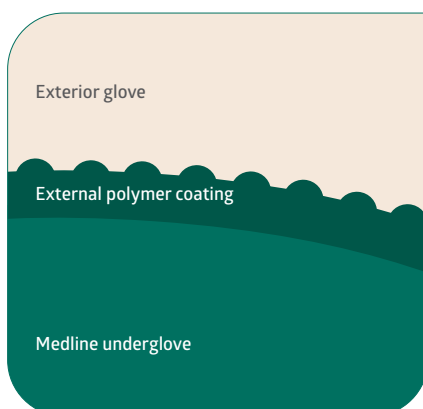
Despite the proven effectiveness of the double-gloving system, some surgeons and healthcare workers still have doubts about it, namely:

- 1) The movement between the exterior glove and underglove, potentially causing control and grip problems
- 2) Less sensitivity and dexterity, as a second glove may be cumbersome.

The gloves used for the Medline double-gloving method solve both of those problems and many others.

## Adhesion with the exterior glove

Manufactured with a special coating on the outside of the glove, Medline undergloves stick to the exterior glove, giving the sensation that only one glove is being worn and thereby improving performance.



## Easily identifiable

The dark green colour of the Medline undergloves allows the wearer to easily see when there is a perforation in the exterior light-coloured glove.



## Less cumbersome

As they are thinner than other traditional surgical gloves, the Medline undergloves do not feel bulky or thick when used, improving sensitivity and dexterity.



# DermAssure Green meets all industry quality standards

Surgeons and staff can feel confident knowing that Medline DermAssure Green surgical gloves are 100% inspected for pinholes, tears and visual defects. Medline's AQL 0.65 meets the EN455-1 requirement of 0.65. Medline's testing meets ASTM, EN and ISO standards.

## Chemo-tested

Medline's DermAssure Green has been tested for use with the following chemotherapy drugs.

Drug	Drug minimum breakthrough detection time
Carmustine (BCNU),* 3.3 mg/ml (3,300ppm)	30.6 minutes (30.6, 30.6, 30.8**)
Cisplatin, 1.0 mg/ml (1,000ppm)	Up to 240 minutes
Cyclophosphamide (Cytoxan), 20 mg/ml (20,000ppm)	Up to 240 minutes
Dacarbazine (DTIC), 10.0 mg/ml (10,000ppm)	Up to 240 minutes
Doxorubicin hydrochloride, 2.0 mg/ml (2,000ppm)	Up to 240 minutes
Etoposide (Toposar), 20.0 mg/ml (20,000ppm)	Up to 240 minutes
Paclitaxel (Taxol), 6.0 mg/ml (6,000ppm)	Up to 240 minutes
Fluorouracil, 50.0 mg/ml (50,000ppm)	Up to 240 minutes
Thiotepa,* 10.0 mg/ml (10,000ppm)	31.2 minutes (31.2, 60.8, 61.3**)
Vincristine sulfate, 1.0 mg/ml (1,000ppm)	Up to 240 minutes

\*Please note that the following drugs have low permeation times: Carmustine (BCNU) 30.6 minutes, Thiotepa 31.2 minutes.

\*\*Specimen 1/2/3

## Ordering information

Item No.	Size	Packaging
MSG6555	5 ½	200 pair/cs
MSG6560	6	200 pair/cs
MSG6565	6 ½	200 pair/cs
MSG6570	7	200 pair/cs
MSG6575	7 ½	200 pair/cs
MSG6580	8	200 pair/cs
MSG6585	8 ½	200 pair/cs
MSG6590	9	200 pair/cs

For more information on this product, please contact your Medline account manager or visit our website: [www.medline.eu/uk](http://www.medline.eu/uk)



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This glove is a class IIa sterile medical device intended to be used by healthcare professionals. Before use, consult instructions and precautions on the corresponding labelling.



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