

Understanding Glove-Related Contact Dermatitis

and How HandPRO® Gloves Made From LOW DERMA™ Nitrile Can Help



Patented Technology*

What is contact dermatitis?

Occupationally related contact dermatitis is a skin condition that can develop from frequent and repeated use of hand hygiene products, exposure to chemicals and glove use. Contact dermatitis is classified as either *irritant* or *allergic*.

Irritant Contact Dermatitis

Irritant contact dermatitis is common, *nonallergic*, and develops as dry, itchy, irritated areas on the skin around the area of contact.

It is usually caused by an irritant, such as the chemicals commonly used in the manufacture of hand products and gloves. It can also be caused by water, (including improper hand drying before donning gloves,) soaps, detergents, solvents, acids, alkalis and friction.

Allergic Contact Dermatitis

Allergic contact dermatitis (type IV hypersensitivity) often manifests as an itchy, red rash, sometimes with small blisters, beginning approximately 6 to 48 hours after contact. Like irritant dermatitis, it is usually confined to the areas of contact.

It can result from exposure to accelerators and other chemicals used in the manufacture of most latex and non-latex gloves.

What are “chemical accelerators?”

Chemical accelerators are used in the glove manufacturing process to “accelerate” the linkage of rubber molecules in natural rubber latex or synthetic rubber latex, such as nitrile and vinyl. The chemicals transform the liquid rubber into a thin, strong and elastic glove film, and stabilizes the material. **These sulfur-based chemical accelerators (dithiocarbamates, thiurams and mercaptobenzothiazoles (MBTs)) cause the majority of skin dermatitis reactions.**

What are LOW DERMA™ “accelerator-free” nitrile gloves?

HandPRO® FreeStyle1100™, Scion700™, Fortis500™, and HandPRO® Series 9300, 9100 and 1750, are manufactured using patented LOW DERMA™ technology nitrile that does not use chemical accelerators. (NO dithiocarbamates, thiurams or mercaptobenzothiazoles (MBTs.)) The result is a thin, soft and stretchy glove that is safer for your skin and stronger than traditionally manufactured nitrile glove material.

I don't have contact dermatitis. Should I still consider switching to a HandPRO® glove made from LOW DERMA™ accelerator-free nitrile?

Yes. According to NIOSH, “because the prognosis of occupational irritant and allergic dermatitis is poor, prevention is imperative. This fact is emphasized by one study showing that 75% of patients with occupational contact dermatitis developed chronic skin disease.”⁽²⁾ *With thousands of potentially harmful chemicals being introduced into the workplace each year, it is important to reduce your exposure wherever possible.*

*Patent www.lowderma.com/patents

References

1. Dr. A. Heese, University of Erlangen, 1989-1992.
2. NIOSH (The National Institute for Occupational Safety and Health,) Allergic & Irritant Dermatitis

Distributed by Fisher Scientific. Contact us today:

In the United States

Order online: fishersci.com

Call customer service: 1-800-766-7000

In Canada

Order online: fishersci.ca

Call customer service: 1-800-234-7437



Did You Know?

Type IV allergies represent up to 28% of glove-related allergic reactions⁽¹⁾

90% of these allergies are due to accelerators⁽¹⁾