

UNDERSTANDING THE RISKS OF ALLERGIES AND CONTACT DERMATITIS

A SIGNIFICANT RISK

Many users who must wear gloves in their daily work—including cleanroom personnel—experience allergic reactions to their gloves.



15-20% of the general population suffer from allergic contact dermatitis.¹

A COSTLY RISK

Allergic contact dermatitis can be difficult and costly to treat—and can lead to potential product contamination and reduced worker productivity and retention.

\$1 BILLION²

Annual cost impact of contact dermatitis



AN AVOIDABLE RISK

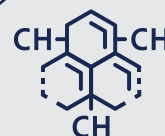
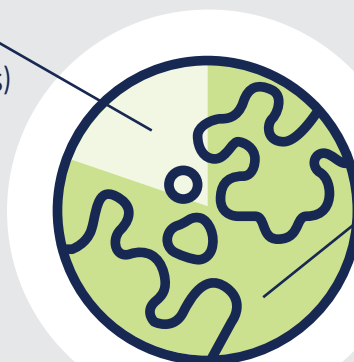
To speed up the process, many glove manufacturers use chemical accelerators in their formulations. However, **chemical accelerators** can act as contact sensitizers, leading to **type IV allergic reactions** and allergic **contact dermatitis** after repeated exposure.

CAUSES OF CONTACT ALLERGIES

20%
antioxidants
softeners (phthalates)
colorants



80%
traditional
vulcanization



REDUCE YOUR RISK WITH **PUREZERO*** ACCELERATOR-FREE CLEANROOM GLOVES



ZERO
Sulfur
Thiurams
Thiazoles
Guanidine
Carbamates

Why take the risk? Now you can help protect your staff—and your product—from the risk of accelerator-related allergies. The proprietary cross-linking agent in **PUREZERO*** HG3 Nitrile Gloves delivers strength and elasticity without the use of chemical accelerators.³

PLUS, HALYARD* **PUREZERO*** HG3 Gloves are manufactured and packaged at our ISO 9001 facility in state-of-the-art cleanrooms and are recommended for ISO Class 3 or higher and Grade A/B/C/D cleanrooms. And of course, **PUREZERO*** Gloves are 100% latex-free too!

WHAT STUDIES SHOW

“The use of accelerator-free medical gloves can be an effective alternative in healthcare workers who are allergic to rubber accelerators.”⁴

Crepy MN, et al, Accelerator-free gloves as alternatives in cases of glove allergy in healthcare workers, **Contact Dermatitis** 2018 Jan.



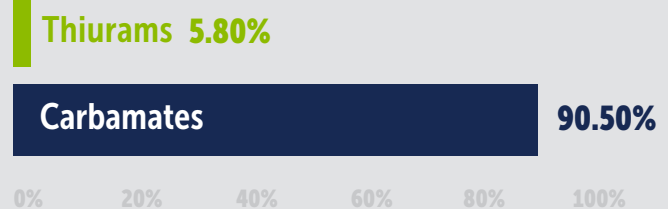
in Type I Contact allergy
(No natural rubber latex)



in Type IV Contact allergy
(No chemical accelerator)

“Accelerators are used in most examination and surgical gloves. Carbamates were the most common accelerator, used in 90.5% of gloves in this study.”⁵

Dejonckheere G et al, Allergic contact dermatitis caused by synthetic rubber gloves in healthcare workers: Sensitization to 1,3-diphenylguanidine is common, **Contact Dermatitis**, 2019 Sep.



For more information or samples,
contact your distributor or visit:
www.purezerogloves.com

1 M. Peiser, T. Tralau, J. Heidler, A. M. Api, J. H. E. Arts, D. A. Basketter, et al, "Allergic contact dermatitis: epidemiology, molecular mechanisms, in vitro methods and regulatory aspects," *Cell. Mol. Life Sci.* (2012) 69:763–781. *J. Life Sci.* (2012) 69:763–781
2 Centers for Disease Control and Prevention, Ongoing Skin Research/NORA Dermal Exposure Research Program (DERP), <https://www.cdc.gov/niosh/topics/skin/skinresearch.html>
3 Not formulated with these commonly used vulcanizing chemicals: Sulfur, Thiurams, Thiazoles, Guanidines and Carbamates.
4 Crepy MN, Lecuen J, Ratour-Bigot C, Stocks J, Bensefa-Colas L. Accelerator-free gloves as alternatives in cases of glove allergy in healthcare workers, *Contact Dermatitis* 2018 Jan ;78(1):28-32. <https://pubmed.ncbi.nlm.nih.gov/28748553/>
5 Dejonckheere G, Herman A, Baeck M. Allergic contact dermatitis caused by synthetic rubber gloves in healthcare workers: Sensitization to 1,3-diphenylguanidine is common, *Contact Dermatitis*, 2019 Sep ;81(3):167-173. <https://pubmed.ncbi.nlm.nih.gov/30891769/>