

HYDRASOFT™ SKIN MOISTURIZING TECHNOLOGY

The Effects of HYDRASOFT™ Skin Moisturizing Technology on Skin Moisture

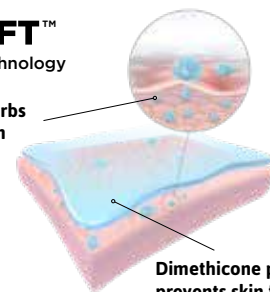
Hand hygiene is one of the most effective actions to reduce the spread of pathogens and prevent infections.¹ Yet, consistent and constant hand washing before and after procedures may reduce levels of moisture and natural oils, attack the lipid layer, and reduce the skin's ability to repair itself, leading to dry or chapped hands and potentially contact dermatitis. That's why it's important to maintain healthy skin as a first line of defense against potential infections.

HYDRASOFT™ Technology is an odorless, water-based coating applied on the inside of the glove that helps retain moisture and rehydrate dry skin to improve the wearers' skin condition.

Ansell researchers recorded the skin hydration levels of people performing multiple hand washes and wearing disposable gloves. Test subjects evaluated standard nitrile gloves as control and MICROFLEX® Soft White Nitrile (TQ-601) with HYDRASOFT™ Technology as test samples on each hand. The initial level of moisture detected on the hand was measured before and after wearing the control and sample gloves for 15 minutes.

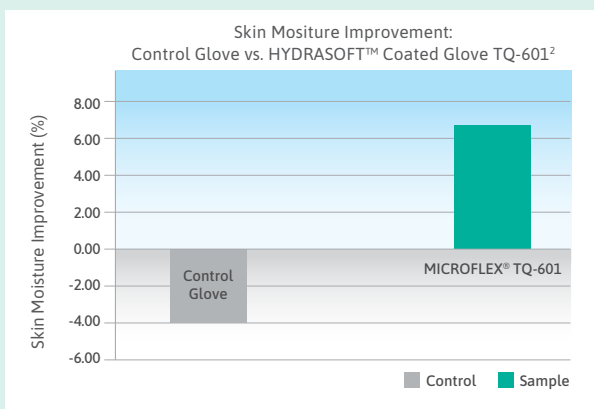


Glycerol additive absorbs and retains moisture in the epidermis



Dimethicone protective layer prevents skin from drying and cracking

Comparison between control and HYDRASOFT™ coated glove*



Results

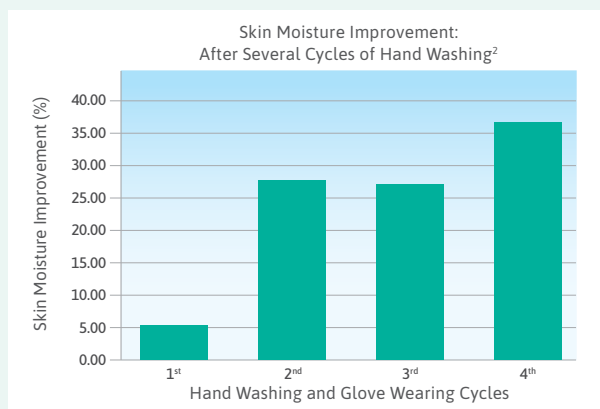
HYDRASOFT™ coated glove:

Showed an improvement in moisture content of more than 6% after wearing the gloves for 15 minutes.

Control glove:

The moisture content worsened by 4% after wearing the glove for 15 minutes.

Effect on skin moisture after multiple hand washes with use of HYDRASOFT™ coated gloves*



Results

We see that the skin moisture level continues to improve when the HYDRASOFT™ coated glove is used several times in a row after multiple cycles of hand washing, and glove wearing.

The graph shows the results for moisture improvement on the hand that was wearing the HYDRASOFT™ coated glove after each cycle. It is likely that the improvement will reach a plateau value at some point, but the experiment was stopped after 4 cycles.

*Moisture improvement is calculated with the formula: $(M_x - M_0) / M_0 \times 100\%$ where X refers to either the CONTROL or the HYDRASOFT™.

References:

- World Health Organization (WHO). World Hand Hygiene Day 2021. Seconds save lives - clean your hands. 2021. <https://www.who.int/campaigns/world-hand-hygiene-day/2021>. Accessed September 16, 2021.
- Data on file. Ansell Healthcare. Accessed September 16, 2021.