



## Extended Wear of Single-Use Nitrile Gloves Briefing

### Overview

SW® continues to make investments in manufacturing, hand health technologies, and testing processes to provide high quality performance products that alleviate the issues associated with wearing single-use gloves. This enables us to raise the bar of single-use nitrile glove expectations.

The coronavirus pandemic has resulted in PPE shortages and significant price increases. Recently, SW has addressed the global glove shortage by investigating performance characteristics of single-use nitrile gloves – such as user comfort and hand health – to understand the impact of long-term, repeated wear.

The SW R&D team tested MegaMan® MM-128-011-DRK/ECO-BK with DriTek® Sweat Management Technology for user comfort, physical performance, moisture absorption, and microbial growth. The team found that this product could withstand 3 days of use and application of commercial hand sanitizer spray with little measurable performance loss, reduction in hand health benefits, and comfort.

### Key Findings

#### *Extended Performance*

The DriTek gloves are rated ANSI 3 in abrasion resistance and ANSI 1 in puncture resistance. Throughout the 3-day trial, the gloves retained over 75% of their tensile performance while puncture resistance remained consistent.

#### *Extended Comfort*

Over the 3-day period, the MegaMan gloves absorbed over 150% more sweat than what was absorbed by conventional single-use nitrile gloves. Sweat absorption was attributed to DriTek – the SW proprietary flock-lined technology that aids in sweat management and allows for more comfortable hands - use after use.

#### *Extended Use*

Wearers were able to easily don, doff, and redon MegaMan when compared to the standard single-use nitrile gloves - which were described as “sticky and clammy.” The flock lining allowed for easy on-and-off between uses.

#### *Extended Life*

Glove surfaces and interiors were sanitized after each day. The flock lining in the tested DriTek product was more effective at absorbing hand sanitizer when compared to the standard single-use nitrile glove. Microbial growth was lower, no spread was present, and there was no significant degradation due to repeated sanitization.

### Conclusion

As PPE resources are in short supply and prices continue to drastically increase, we all must consider how reusing quality single-use nitrile gloves can be an economical and practical option. SW continues to change the perception of single-use gloves and push the boundaries of nitrile glove performance by exploring the capabilities of extended wear and repeated use.

