



# Cavilon™

Skin Care Solutions

3M™ Cavilon™ Advanced Skin Protectant

*Data on file at 3M (Study EM-05-013924)*

## **Durability of 3M™ Cavilon™ Advanced Skin Protectant compared to three commercially available film barriers in healthy human subjects**

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### **BACKGROUND**

A new differentiated skin protectant with extended durability and ability to adhere to wet, weepy denuded skin has been developed. This product is intended to manage Category 2 Incontinence-associated Dermatitis (IAD) and other types of moderate to severe skin damage. It may also be used to protect intact skin at high risk for breakdown. The objective of this controlled, randomized, prospective open-label study was to determine the durability of this new protectant when applied to intact skin in 21 healthy human volunteers, and compare it to three other products used for similar clinical indications.

### **METHODS**

Eight ¾-inch circles of black carbon pigment were applied to the forearms (4 on each arm to allow for duplicates) and covered with the various products. Subjects conducted normal routine activities over 7 days. Photographs were taken and a test site assessment was completed before and after application of the products on Day 0, and at Days 1, 2, 3, 4, and 7 to evaluate pigment loss over time. Carbon Integrated Optical Density (CIOD) was measured, under the assumption that a loss of pigment correlated with a loss of the protective product.

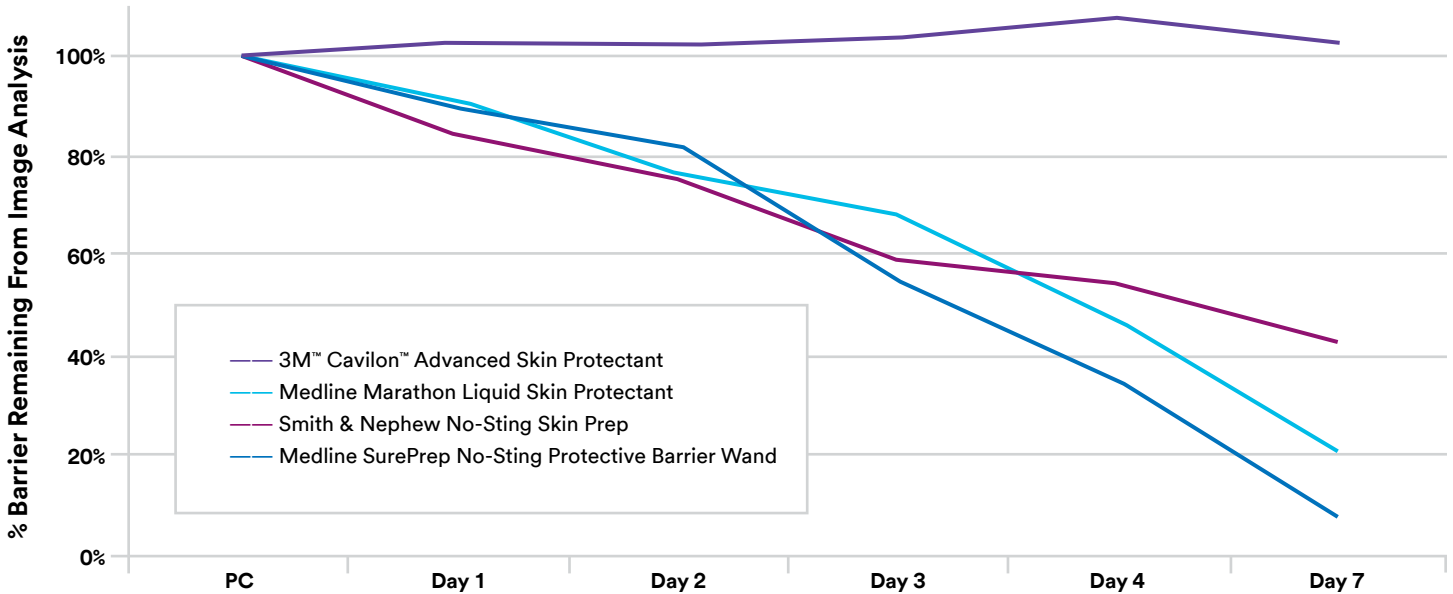
### **RESULTS**

The percent of intact barrier was significantly greater ( $p < 0.05$ ) for the new skin protectant than for the other three products at all time points following Day 0. The new skin protectant showed no significant change in CIOD ( $p = 0.46$ ) from Day 1 through 7, indicating no meaningful wear over time. The other three products showed significant changes in CIOD ( $p < 0.01$ ) beginning at Day 2 or 3.

### **CONCLUSION**

The new skin protectant was more durable than the other products tested. It remained in place for up to 7 days for all subjects, whereas the other products had less than 50% remaining on the skin by that time point.

**Survival curve: Percent product remaining over time, based on Carbon Integrated Optical Density measurements.**



**Example of one subject: volar forearm with tested formulations at Days 0, 1, 2, 3, 4, and 7.**



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 70-2011-6928-4

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