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CSPA Designation DCC-03 Rug Shampoo Study

Prepared for

Process Cleaning Solutions
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Prepared by

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Scope: To determine the cleaning effectiveness of a carpet extraction cleaner.

Products Tested:

Product	LC#	Date Received	Lot#
PCS Peroxy MicroClean Concentrate Formula A	22-T0446	May 6, 2022	851073605414

Standards: CSPA DCC-03- Rug Shampoo

Equipment: Michael's Pre 50 Carpet Extraction Machine
Dyson Slimball Vacuum
Caron 6010 Environmental Chamber
Chroma Meter CR-410 Colorimeter
ASTM D6540 Resoiling drum

Materials: Soil Mixture: Peat Moss
Portland Cement
Kaolin Clay
Silica
Red Iron Oxide
Charcoal
Shaw Industries Undyed Carpet, Style # 4G036
Zytel 6,6 Nylon Pellets (type 101L color NC010)

Procedure: The L*, a*, b* color values of an 8" x 5" virgin untreated carpet swatch are measured and noted. The carpet swatch is then soiled with the soiling drum using the specified soil, vacuumed to remove loose soil. Each carpet swatch is cleaned with the test product by spraying on a pre-determined amount via the test methods below.

Cleaning Method:

Approximately 10 grams of the diluted test product is applied to the surface of the carpet swatches. After 10 minutes the test product is extracted off the surface by using heated tap water (40°C) and then allowed to dry overnight. Final L*, a*, b* color values are then remeasured and the delta E color change is calculated and reported. This will show the degree of soil or lack of soil remaining on the carpet.



Results:

Table I: Degree of Soil Remaining

Product	Dilution	Extraction	Delta E
PCS Peroxy MicroClean Concentrate Formula A	32:1	With heated tap water	18.1
Water Control	n/a	With heated tap water	18.4

*the lower the Delta-E, the better the soil removal

Delta-E Explained: Delta E is used to describe (mathematically) the distance between two colors, (i.e., before and after exposure to solution). On a typical scale, the Delta E value will range from 0 to 100.

Delta E	Perception
<=1.0	Not perceptible by human eyes
1-2	Perceptible through close observation
2-10<	Perceptible at a glance

Conclusion: The test product is similar in cleaning efficiency/soil removal as the water control.

Project Managed by: _____
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