CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016

DateRun: 10/31/2016

Experimenters: George Liang

ClientType: Cleaning Equipment Mfr

ProjectNumber: Project #2

Substrates: Textile

PartType: Coupon

Contaminants: Dirt

Cleaning Methods:

Analytical Methods: Gloss-Color Meter

Purpose: To evaluate supplied product for carpet stain removal

Experimental Procedure:

The purpose of this evaluation was to assess effectiveness of removing synthetic soil from carpets. The procedure followed is a modified version of the Institute of Inspection Cleaning and Restoration Certification (IICRC) Standard and Reference Guide S100. Most of the layout of the testing was modeled after Appendix D, IICRC Carpet Cleaning Methods Testing Protocol.

Three almond white tufted cut pile test carpet measuring 4.5 inches by 17.5 inches were stained with 2 grams of synthetic AATC soil for each cleaner. One almond carpet was divided into three equal sections for evaluation. The staining agent was applied to the surface of the carpet and was placed into a 1 gallon can with 174 grams of rubber tubes inside. The can was cranked at a rate of 42 rpm for 5 minutes in one direction. Thereafter it was done in the other direction for another 5 minutes.

After applying the soil agent onto the carpet, the carpet was left to soak with the cleaning agent for 30 seconds with 15 sprays in total for each carpet with the respected cleaning agent. The carpet was manually cleaned with the GSLWU machine. It was set to run for 90 cycles or about 2.5 minutes. After every 30 cycles, 6 sprays of the cleaning agent were applied onto each section of the carpet.

Following an overnight drying, the test carpets were evaluated with color readings using the BYKgloss meter and a visual rating. A minimum of three lab personnel were used to evaluate the stain removal efficacy which were then averaged together for the final rating. The evaluations were based on the following scale:

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Clean Rating Key
1 No Stain
2 Slight Stain
3 Noticeable Stain
4 Considerable Stain
5 Severe Stain

Results:

	Initial	Dirty	Final	Final	% Change	Ave Change
Force of Nature	63.21	54.54	60.21	4.75		
	62.38	51.24	58.56	6.12		
	62.46	56.47	60.92	2.47	4.45	1.8
Resolve	59.88	53.51	56.98	4.84		
	63.11	49.43	55.79	11.6		
	63.68	55.1	59.83	6.05	7.5	3.6

Visual Results

Cleaner:	Visual			Average	Ave Visual Clean
Force of Nature	1	1	1	1	
	2	2	2.5	2.2	
	3	3	2.5	2.8	2
Resolve	1	1	2.5	1.5	
	3	2	3	2.7	
	2	2	2.5	2.2	2.1

Summary:

Substrates:	Textile

CLEANING LABORATORY EVALUATION SUMMARY

Contaminants:	Dirt				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Healthier Cleaning Innovations	Force of Nature	100	0.00	☑	Visual the cleaner is effective in removing synthetic AATC soil
Reckitt Benckiser	Resolve High Traffic Foam Carpet Cleaner	100	0.00	☑	Visual the cleaner is effective in removing synthetic AATC soil

Conclusion:

The light value measures the carpets contrast between light and darkness. The percent average in change for light was done in comparison between the initial and its clean value to note if there are any significant changes in light contrast. Force of Nature was slightly more effective at removing synthetic AATCC soil than Resolve. Force of Nature had an average percent change between the cleaned and the initial carpet light contrast value of 4.45%. Whereas Resolve's average percent change is 7.50%.

A visual rating of less than 3 is considered to be an effective cleaner. Both cleaners visually looked effective in removing the synthetic carpet soil. There visually was no difference between how well each carpet was cleaned by the respective cleaning agent in comparison between Force of Nature and Resolve. The overall best cleaning agent would be listed as follows: Force of Nature and Resolve.