

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2010
DateRun: 04/09/2010
Experimenters: Junhee Cho
ClientType: Cleaner Manufacturer
ProjectNumber: Project #1
Substrates: Textile
PartType: Coupon
Contaminants: Dirt
Cleaning Methods: Manual Wipe
Analytical Methods: Gloss-Color Meter
Purpose: To evaluate carpet resoiling characteristics of supplied cleaning product for GS 37 certification

Experimental Procedure: Carpet pieces that were previously soiled and cleaned with the supplied product and Liquid Formula 90 (industry standard product) were resoiled by placing the carpet sections into the 1-gallon can, making sure the carpet lined the inner wall of the can. Nalgene® tubing cut into 1/8" pieces were poured into the bucket and 2 grams of the AATCC soil was distributed along the width of the can. The can was lidded and placed into a harness attached to a crank shaft. The crank was turned at an average rate of 42 rpm by hand for 5 minutes in one direction, followed by 5 minutes of rotation in the opposite direction. At the end of the 10-minute soiling regime, the carpet was placed onto a carpet template and vacuumed with a Eureka SuperBroom (Brush-Up, Motor-Driven/Brush-Roll) vacuum for 5 strokes in the forward direction followed by the same number of strokes in the backward direction. The carpet pieces were evaluated again using a BYK specro-guide gloss color meter was used to measure L-values from the surface of the carpet. Visual comparison was also preformed to determine which product looked cleaner.

Results: The industry standard product resulted in slightly higher post vacuuming color meter readings. Visually, there was little difference between the two carpet sections after resoiling and vacuuming. The table lists the readings for each cleaner.

cleaner	Dilution	sub(part)	final L value	resoil L value	vacuum
MD Steston PC 120	1:64	A	64.91	52.31	56.13
		B	71.07	48.72	55.92
		C	65.17	52.12	55.37
MD Steston PC 120	1:128	A	69.87	54.55	56.36
		B	73.12	62.79	62.91
		C	67.73	53.64	56.70
MD Steston PC 120	1:256	A	65.19	53.70	55.34
		B	63.97	50.75	49.62
		C	68.48	57.45	58.59
MD Steston PC 220	1:64	A	65.44	54.48	56.98
		B	66.61	56.87	60.37
		C	67.82	54.63	58.22
MD Steston PC 220	1:128	A	61.54	55.16	53.35
		B	61.37	48.33	50.19
		C	67.84	54.71	59.27
MD Steston PC 220	1:256	A	66.71	53.52	56.89
		B	63.58	54.63	58.08
		C	71.21	56.27	59.75

CLEANING LABORATORY EVALUATION SUMMARY

Chemspec Liquid 90	1:320	A	64.79	51.61	56.48
		B	63.62	48.18	53.48
		C	66.42	53.21	56.18

Average L Values

cleaner		Ave Resoil	Ave Vacuum	Difference
MD Stetson PC 120	1:64	51.05	55.81	4.76
MD Stetson PC 120	1:128	56.99	58.66	1.66
MD Stetson PC 120	1:256	53.97	54.52	0.55
MD Stetson PC 220	1:64	55.33	58.52	3.20
MD Stetson PC 220	1:128	52.73	54.27	1.54
MD Stetson PC 220	1:256	54.81	58.24	3.43
Chemspec Liquid 90	1:320	51.00	55.38	4.38

Summary:

Substrates:	Textile				
Contaminants:	Dirt				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Next-Gen Supply Group	PC 120 Peroxide Multisurface Cleaner	1.56		<input checked="" type="checkbox"/>	
Next-Gen Supply Group	PC 120 Peroxide Multisurface Cleaner	0.78		<input type="checkbox"/>	
Next-Gen Supply Group	PC 120 Peroxide Multisurface Cleaner	0.39		<input type="checkbox"/>	
Next-Gen Supply Group	PC 220 Peroxide Multipurpose Cleaner	1.56		<input checked="" type="checkbox"/>	
Next-Gen Supply Group	PC 220 Peroxide Multipurpose Cleaner	0.78		<input type="checkbox"/>	
Next-Gen Supply Group	PC 220 Peroxide Multipurpose Cleaner	0.39		<input checked="" type="checkbox"/>	
Chemspec	Liquid Formula 90	0.16		<input checked="" type="checkbox"/>	

Conclusion:

MD Stetson products PC 120 at 1:64 and PC 220 at 1:64 and 1:256 had comparable resoiling results to the Chemspec Liquid 90 formulation.