CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2007
DateRun:	08/12/2007
Experimenters:	Jason Marshall
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Textile
PartType:	Coupon
Contaminants:	Dirt
Cleaning Methods:	
Analytical Methods:	Light Meter
Purpose:	To evaluate carpet cleaners for resoiling resistance.
Experimental Procedure:	Carpet pieces that were previously soiled and cleaned with DFC 105 (client 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 SPER Scientific Light Meter 840021 used to measure Foot Candles from the surface of the carpet. Visual comparison was also preformed to determine which product looked cleaner.
Results:	The industry standard product resulted in higher post vacuuming light meter readings. Visually, there was no difference between the two carpet sections after resoiling and vacuuming. The table lists the readings for each cleaner.

PC 120 64:1				
Post Clean	Resoil	Vacuumed	Difference	
10.2	8.1	8.9	0.8	
11.6	9.1	9.5	0.4	
14.2	8.5	10.4	1.9	
20.9	10.2	11.7	1.5	
18.7	10.6	12.3	1.7	
17.3	11	12.8	1.8	
15.5	9.6	10.9	1.4	Ave 1
18.8	9.5	12.3	2.8	
22.6	10	11.7	1.7	
21.7	8.8	9.5	0.7	
20.7	17.7	18.5	0.8	
23.2	16	17.5	1.5	
22.4	17.2	18.7	1.5	
21.6	13.2	14.7	1.5	Ave 2
14.3	6.5	7.1	0.6	
13.1	8.8	10	1.2	
11	9.1	9.9	0.8	
13.2	16.4	17.6	1.2	
15.8	12	12.9	0.9	
21.2	8.4	9.2	0.8	
14.8	10.2	11.1	0.9	Ave 3

Total Resoil Ave for PC 120 @1:64: 1.26

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PC 120 128:1				
Post Clean	Resoil	Vacuumed	Difference	
23.4	7.7	8.5	0.8	
19.6	10.7	11.4	0.7	
16.1	12	12.6	0.6	
19.5	14.9	15.8	0.9	
23.9	15.9	16.4	0.5	
26	13.1	14	0.9	
21.4	12.4	13.1	0.73	Ave 1
25.9	5	5.7	0.7	
26.9	5.8	6.4	0.6	
26.7	6.8	7.4	0.6	
34.2	12.3	12.8	0.5	
31	9.9	10.6	0.7	
39.4	8.1	9	0.9	
30.7	8	8.7	0.7	Ave 2
18.2	4.9	5.7	0.8	
30	5	5.9	0.9	
29.1	5.1	5.8	0.7	
28.1	7.6	8.6	1	
28.9	7.1	8.2	1.1	
24.2	8.2	9.1	0.9	
26.4	6.3	7.2	0.9	Ave 3

Total Resoil Ave for PC 120 @ 1:128: 0.77

Liquid 90				
Post Clean	Resoil	Vacuumed Difference		
8.8	7.6	8	0.4	
11.6	8.1	8.4	0.3	
14.2	9.2	9.8	0.6	
20.9	17.4	18	0.6	
18.7	15	15.3	0.3	
17.3	13.2	13.6	0.4	
15.3	11.8	12.2	0.4	Ave 1
18.8	4.7	5.1	0.4	
22.6	4.5	4.6	0.1	
21.7	5.9	6.2	0.3	
20.7	11.5	12	0.5	
23.2	7.5	8	0.5	
22.4	8.1	8.4	0.3	
21.6	7	7.4	0.4	Ave 2
14.3	6	6.6	0.6	
13.1	5.8	6.1	0.3	
11	5.2	5.6	0.4	
13.2	7.1	7.3	0.2	
15.8	8.4	8.8	0.4	
21.2	10.2	11.1	0.9	
14.8	7.1	7.6	0.5	Ave 3

Total Resoil Ave for Liquid 90: 0.42

Summary:

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Substrates:	Textile				
Contaminants:	Dirt				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Next-Gen Supply Group	PC 120 Peroxide Mulitsurface Cleaner	1.5	0.00	☑	
Next-Gen Supply Group	PC 120 Peroxide Mulitsurface Cleaner	0.78	0.00	☑	
Chemspec	Liquid Formula 90	0.156	0.00	☐	

Conclusion: The two dilutions resulted in a greater resoiling resistance than the industry standard. The higher concentration of PC120 worked better than the lower concentration.