CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2015
DateRun:	01/22/2015
Experimenters:	Russell Curtis
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #4
Substrates:	Textile
PartType:	Coupon
Contaminants:	Inks, Oil, Food
Cleaning Methods:	Manual Wipe
Analytical Methods:	Visual
Purpose:	To evaluate supplied product for carpet stain cleaning following CRI TM 110 Section 1.

Experimental Procedure:

The purpose of this evaluation was to assess effectiveness of spot and stain removal chemicals by rating the removal of specific staining agents.

Two almond white tufted cut pile test carpet measuring 18 inch by 24 inch were stained with eight staining agents. Each staining agent was applied to the test carpet in triplicate, spaced out at 2.5 inches. The staining agent was applied to the surface using a trigger pump spray bottle capable of delivering 2.5 +/- 0.5 ml of stain mixture. The spray was focused within a staining ring measuring 1.5 inches wide by 1.2 inches high. The eight staining agents included mustard, catsup, coffee, grape juice, black permanent marker (1" diameter circle instead of 2.5 ml), dirty motor oil, AATCC synthetic soil and chocolate syrup. These staining agents were used according to the dilution ratios listed in the table below.

Staining Agent Dilution ratio
Mustard 1:2 mustard:water
Catsup 1:3 catsup:water
Hot Coffee 60 deg +/-3C 1 teaspoon coffee to 175 ml water
Purple Grape Juice Full concentration
Black Permanent Marker-Chisel Point N/A
Dirty Motor Oil 1:1 oil:heptane*
AATCC Synthetic Soil 0.5 grams/100 ml water
Chocolate Syrup 1:4 chocolate:water

*heptane used in place of tetradecane

The staining agent mixture was poured into the spray bottle. The nozzle of the bottle was centered inside the staining ring and three pumps of the spray bottle were performed to deliver the 2.5 ml of mixture to the test carpet. The staining ring was left in place until the staining agent was completely soaked into the test carpet. The ring was rinsed in between each staining location. The two completed test carpets were allowed to dry for 48 hours +/- 2 hours before conducting the stain removal procedure.

Following the overnight drying, any excess solid staining agent was removed from the test carpet. The cleaning agent was applied to the surface so that the stain was saturated. The solution was allowed to sit on the stain for 2 minutes. The saturated stain was blotted with a clean dry Kimberly Clark Reinforced wiper towel. Any transfer of the stain/cleaning agent to the towel was noted. Blotting continued until all evidence of liquid transfer was gone. The total number of applications was recorded for each stain. The test carpet was allowed to sit for another 24 +/-2 hours to dry before evaluating the stains. 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:

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

ChemistriesEvaluated: Shout Stain and Odor, Shout Urine, Bran Buzz Carpet 0.2%, Brand Buzz Urine 0.4%, Resolve

Results:

Shout Stain					
Cleaner	Tester	Soil	Tester 1	Tester 2	Tester 3
1	1	A	2	2.5	3
1	2	A	2	3	4
1	3	A	2	2.5	2.5
1	1	B	3	2	3

Cleaner	Tester	Soil	Tester 1	Tester 2	Tester 3
1	2	B	3	2	3
1	3	B	2	2	3
1	1	C	2.5	2.5	2.5
1	2	C	3	3	2
1	3	C	2.5	3	3
1	1	D	2	2.5	2.5
1	2	D	2	3	3
1	3	D	1	1.5	1.5
1	1	E	5	4.5	4.5
1	2	E	4	3	3
1	3	E	4	3.5	3.5
1	1	F	3	3	3.5
1	2	F	2	3	4
1	3	F	3	3.5	3.5
1	1	G	1	1	1
1	2	G	2	1	1
1	3	G	1	1	1
1	1	H	5	4.5	5
1	2	H	4	3	4
1	3	H	5	5	5
	Composite		22	21.83	24
Shout Urine					
Cleaner	Tester	Soil	Tester 1	Tester 2	Tester 3
2	1	A	4	4	4
2	2	A	4	3	4
2	3	A	4	4	4
2	1	B	3.5	3.5	3.5
2	2	B	3	3	3
2	3	B	3.5	3.5	3.5
2	1	C	2.5	2.5	2.5
2	2	C	3	3	4
2	3	C	1.5	1.5	1.5
2	1	D	2	2.5	2.5
2	2	D	2	2	3
2	3	D	1.5	1.5	1.5
2	1	E	5	4.5	4.5
2	2	E	4	4	4
2	3	E	5	5	5
2	1	F	5	5	4.5
2	2	F	4	4	3
2	3	F	5	5	5
2	1	G	2	1.5	2
2	2	G	2	2	1
2	3	G	1	1	1
2	1	H	4.5	5	4.5
2	2	H	3	4	3
2	3	H	5	5	5
	Composite	26.67	26.67	26.5	
BranBuzz Carpet					
Cleaner	Tester	Soil	Tester 1	Tester 2	Tester 3
3	1	A	4	5	4
3	2	A	4	3	3
3	3	A	4	4	4

Cleaner	Tester	Soil	Tester 1	Tester 2	Tester 3
3	1	B	3	3	3
3	2	B	3	2	3
3	3	B	3.5	3.5	3.5
3	1	C	3	3	3
3	2	C	3	2	3
3	3	C	3	3	3
3	1	D	2	2	1.5
3	2	D	2	1	2
3	3	D	2	2	2
3	1	E	4.5	4	4.5
3	2	E	4	3	4
3	3	E	5	5	5
3	1	F	4	5	4
3	2	F	5	4	4
3	3	F	5	5	5
3	1	G	2.5	3	3
3	2	G	2	2	2
3	3	G	5	5	5
3	1	H	1.5	1.5	1.5
3	2	H	4	4	4
3	3	H	5	5	5
	Composite		28	26.67	27.33
BranBuzz Urine					
Cleaner	Tester	Soil	Tester 1	Tester 2	Tester 3
4	1	A	4	3.5	3.5
4	2	A	4	3	3
4	3	A	3.5	3.5	3.5
4	1	B	3.5	4	4
4	2	B	3	4	4
4	3	B	4	4	4
4	1	C	3	3	3
4	2	C	3	3	2
4	3	C	2.5	3	2.5
4	1	D	2	1.5	2
4	2	D	3	2	3
4	3	D	2	1.5	2
4	1	E	4.5	4.5	4.5
4	2	E	4	3	3
4	3	E	5	5	5
4	1	F	4	4	4
4	2	F	4	4	3
4	3	F	5	5	5
4	1	G	2	2	1.5
4	2	G	2	2	1
4	3	G	1	1	1
4	1	H	5	5	5
4	2	H	3	4	3
4	3	H	5	5	5
	Composite		27.33	26.83	25.83
Resolve					
Cleaner	Tester	Soil	Tester 1	Tester 2	Tester 3
5	1	A	3	3	4
5	2	A	3	3.5	3.5
5	3	A	3.5	3.5	3.5

5	1	B	2	3	3
5	2	B	2.5	3.5	3.5
5	3	B	3	3	3
5	1	C	3	3	2
5	2	C	1	1.5	1
5	3	C	1.5	1.5	1.5
5	1	D	1	2	1
5	2	D	1	1.5	2
5	3	D	1	1	1
5	1	E	4	3	3
5	2	E	5	5	4.5
5	3	E	4	4	4
5	1	F	3	4	4
5	2	F	4	5	5
5	3	F	4.5	4.5	4.5
5	1	G	2	1	2
5	2	G	3	1	3
5	3	G	2	2	2
5	1	H	4	4	4
5	2	H	5	5	5
5	3	H	5	5	5
	Composite		23.67	24.5	25

Summary

Soil	Shout Stain	Shout Urine	BrandBuzz	BranBuzz Urine	Resolve
Mustard	2.6	3.9	3.9	3.5	3.4
Catsup	2.6	3.3	3.1	3.8	2.9
Hot Coffee	2.7	2.4	2.9	2.8	1.8
Purple Grape	2.1	2.1	1.8	2.1	1.3
Black Marker	3.9	4.6	4.3	4.3	4.1
Chocolate	3.2	4.5	4.6	4.2	4.3
Motor Oil	1.1	1.5	3.3	1.5	2.0
AATCC soil	4.5	4.3	3.5	4.4	4.7
Composite	22.6	26.6	27.3	26.7	24.4

Summary:

Substrates:	Textile				
Contaminants:	Inks, Oil, Food				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Brand Buzz	Brand Buzz Urine	100		☑	
Fisher Scientific	Absolute Ethanol	0	0.00	☐	
Fisher Scientific	Absolute Ethanol	0	0.00	☐	
SC Johnson & Son Inc	Shout Urine Destroyer Carpet	100		☐	
Brand Buzz	Brand Buzz Carpet	100		☑	
Reckitt Benckiser	Resolve High Traffic Foam Carpet Cleaner	100		☐	
SC Johnson & Son Inc	Shout Carpet Oxy - Stain & odor remover	100		☐	

Conclusion: The composite scores show that BranBuzz Carpet was the highest performing product, followed closely by BranBuzz Urine and Shout Urine. Each BranBuzz Cleaner outperformed their Shout comparative product.