CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2015

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ClientType: Cleaner Manufacturer

ProjectNumber: Project #3

Substrates: Carpet

PartType: Coupon

Contaminants: Odor

Cleaning Methods:

Analytical Methods: Smell

Purpose: To evaluate supplied products for the elimination of pet malodors.

Experimental Procedure: Clean carpet was cut into ten 2 in x 4 in rectangular strips. A panel of three then examined the odors to determine the baseline values using nine bottles, including one control. These strips were placed into glass bottles and the cat urine was directly applied to the carpet to determine baseline dirty odor characteristics. Each panelist was asked to describe the odor and rank the level of intensity of the malodor. After the panelists observed the initial odors, bottles were recapped and allowed to sit overnight for three days. After aging the contaminated carpets, each bottle was subjected to three rounds of cleaning agent treatments and each panelist assessed malodor levels after each cycle of treatment. Treatments of contaminated bottles are stopped after the 3rd cycle of treatment. An effective cleaner will have a malodor level of under two after the 3rd round of treatment. The ranking of malodor level is as follows: 1 being close to no smell of malodor to 5 being the worse malodor level. Then the malodor was allowed to sit overnight to determine if there was any change of malodor levels. If there was a high increase in malodor level that results in a malodor level of 2 and higher; an additional spray of treatment is applied onto the carpet to see if the cleaning agent can eliminate the increased malodor from the overnight sit.

Results:

Cleaner	Fresh 4 Pets	Original				Average
Bottle 1			4.5	4.5	4	4.3
Bottle 2			5	4.5	4	4.5
Bottle 3			5	5	5	5
	% Average: 4.6					
Cleaner	Fresh 4 Pets	Sprays: 2				
Bottle 1			3	3.5	3.5	3.3
Bottle 2			3	3.5	3.5	3.3
Bottle 3			4	4.5	4	4.2
	% Average: 3.6					
Cleaner	Fresh 4 Pets	Sprays: 4				
Bottle 1			2.5	2.5	2	
Bottle 2			3	3	2	2.3
Bottle 3			3	2.5	2.5	2.7
	% Average: 2.6					2.7
Cleaner	Fresh 4 Pets	Sprays: 6				
Bottle 1			2	2.5	2	
Bottle 2			2	2	2	2.2
Bottle 3			3	1.5	2.5	2
	% Average: 2.2					2.3
Cleaner		Original				

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	Stain & Odor Remover					
Bottle 1			4	4.5	4.5	4.3
Bottle 2			5	5	5	5
Bottle 3			5	5	5	5
	% Average: 4.8					
Cleaner	Stain & Odor Remover	Sprays: 2				
Bottle 1			3	4.5	3.5	3.7
Bottle 2			3.5	4	5	4.2
Bottle 3			4.5	4.5	5	4.7
	% Average: 4.2					
Cleaner	Stain & Odor Remover	Sprays: 4				
Bottle 1			2	3.5	3.5	3
Bottle 2			2.5	3.5	3	3
Bottle 3			3	4	3.8	3.6
	% Average: 3.2					
Cleaner	Stain & Odor Remover	Sprays: 6				
Bottle 1			2	2	2	2
Bottle 2			2.5	3.5	2	2.7
Bottle 3			3	3	2.5	2.8
	% Average: 2.5					
Cleaner	Urine Destroyer	Original				
Bottle 1			5	5	5	5
Bottle 2			4.5	4.5	4	4.3
Bottle 3			5	4	4.5	4.5
	% Average: 4.6					
Cleaner	Urine Destroyer	Sprays: 2				
Bottle 1			4	3.8	3.5	3.8
Bottle 2			3	4	2	3
Bottle 3			3.5	3	4	3.5
	% Average: 3.4					
Cleaner	Urine Destroyer	Sprays: 4				
Bottle 1			3	3.5	3	3.2
Bottle 2			3	2.5	2	2.5
Bottle 3			3	2	2.5	2.5
	% Average: 2.7					
Cleaner	Urine Destroyer	Sprays: 6				
Bottle 1			2.5	3	3	2.8
Bottle 2			2.5	2.5	1.5	2.2

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Bottle 3			2.5	2	2	2.2
	% Average: 2.4					

Overnight Results

Cleaner	Fresh 4 Pets	Overnight				
Bottle 1			2	1.8	1.5	1.8
Bottle 2			2	2.5	2	2.2
Bottle 3			4	4	2.5	3.5
	% Average: 2.5					
Cleaner	Fresh 4 Pets	Sprays: 2 Overnight				
Bottle 1			2.5	2	1.5	2
Bottle 2			2	2	2	2
Bottle 3			3.5	3	2.5	3
	% Average: 2.3					
Cleaner	Stain & Odor Remover	Overnight				
Bottle 1			3	4.5	3	3.5
Bottle 2			3.5	3	3	3.2
Bottle 3			3.5	4.5	2.5	3.5
	% Average: 3.4					
Cleaner	Stain & Odor Remover	Sprays: 2 Overnight				
Bottle 1			3	4	2.5	3.2
Bottle 2			2.2	3	3	2.7
Bottle 3			2.5	4	2.5	3
	% Average: 3.0					
Cleaner	Urine Destroyer	Overnight				
Bottle 1			3.5	3	3	3.2
Bottle 2			2	3.5	2.5	2.7
Bottle 3			3	3.5	2.5	3
	% Average: 2.9					
Cleaner	Urine Destroyer	Sprays: 2 Overnight				
Bottle 1			3	2.8	2	2.6
Bottle 2			2	2	2.5	2.2
Bottle 3			2.5	2.5	2.5	2.5

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	% Average: 2.4					

Summary Table

Cleaner	Sprays	% Average
Fresh 4 Pets	6	2.2
Stain & Odor Remover	6	2.5
Urine Destroyer	6	2.4
Overnight Summary Table		
Cleaner	Avg.	After Spray
Fresh 4 Pets	2.5	2.3
Stain & Odor Remover	3.4	3
Urine Destroyer	2.9	2.4

Summary:

Conclusion:

Substrates: Carpet
Contaminants: Cat Urine

Product Name Conc. Observations
Fetch 4 Pets RTU Partially Effective at reducing malodor level
Stain & Odor Remover RTU Partially Effective at reducing malodor level
Urine Destroyer RTU Partially Effective at reducing malodor level

A cleaner is considered effective once it has reached a malodor level that is under 2 within 3 cycles of treatment. The most effective cleaning agent at removing the malodor level is Fresh 4 Pets. After the 3rd cycle of treatment it had the lowest malodor level of 2.2. Comparatively the three cleaning agents were relatively as effective at reducing malodor level after the 3rd cycle of treatment. Notably cleaning agents Stain & Odor Remover and Urine Destroyer both have a malodor level relatively close to that of Fresh 4 Pets; with a respective difference in malodor level of only 0.3 and 0.2 after the 3rd cycle of treatment. After an overnight sit; Fresh 4 Pets was noted to have the least rise in malodor level from a rating of 2.2 to 2.5. That is an increase in malodor level of 0.3. Furthermore, cleaning agent Urine Destroyer had the second least noticeable increase in malodor level overnight; with a malodor level increase of 0.5. Stain & Odor Remover had the highest increase in malodor of 0.9 from the overnight sit. After one additional round of treatment; bottles that were treated with cleaning agents Fresh 4 Pets and Urine Destroyer effectively removed the malodor level from the overnight sit. However, bottles treated with cleaning agent Stain & Odor Remover did not eliminate the malodor level from the overnight sit.

Overall the most effective cleaning agent at removing the malodor level would be as follows: Fresh 4 Pets, Urine Destroyer and Stain & Odor Remover.