

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016  
 DateRun: 01/07/2016  
 Experimenters: Russell Curtis, Luis Raudales, Alicia McCarthy  
 ClientType: Cleaner Manufacturer  
 ProjectNumber: Project #10  
 Substrates: Granite  
 PartType: Coupon  
 Contaminants: Odor  
 Cleaning Methods: Low Pressure Spray  
 Analytical Methods: Smell

Purpose: To evaluate the quality of odor removal cleaners on cat urine in kitty litter.

Experimental Procedure: For each cleaner, two glass bottles with covers were filled with 3/4 cup of Tidy Cats 24/7 Performance Triple Odor Protection: Urine, Feces, & Ammonia. An extra bottle was prepared to be the unknown control for the test. Fresh cat urine was squeezed into the bottles until pungent and the bottles were covered and shaken to soak litter completely. The closed bottles sat for five days before testing.

The two cleaners came ready to use. One was a liquid and the other was in powder form. The liquid cleaner, Clorox Fresh Step, was placed in a spray bottle. One gram of the Fresh Step Carpet Powder was pre-weighed in six weight dishes to represent two sprays of the spray bottle. Three testers were used to determine initial odor testing of the bottles. The lead tester then picked the most pungent bottle based off a Odor scale rating:

Odor Rating Scale

- 1) No Urine Smell
- 2) Little Urine Smell
- 3) Some Urine Smell
- 4) A lot of Urine Smell
- 5) Pungent Urine Smell

Initials were recorded and the cleaning process was started. Two sprays of the Clorox was placed in two bottles and one weigh dish per bottle of the Fresh Step Carpet Powder was placed in two bottles. Five minutes was timed and then a round of odor ratings were conducted. The control was randomly used during odor ratings. This process was repeated until a total of six sprays per bottle and three weigh dishes were added to each bottle except the control.

Results:

Cleaner	Bottle	Initial	2 Sprays	4 Sprays	6 Sprays	Testers
Clorox Fresh Step Cat						
Litter Box Cleaner	A	5	3	1.5	1	I
	B	5	4	1.5	1	II
	C	4	3	1.5	1	III
	A	5	2	1.5	1	I
	B	4.5	2	1.5	1	II
	C	4	2	1.5	1.5	III
Fresh Step Carpet Powder Blender						
	A	5	1	1	1	I
	B	5	1.5	1	1	II
	C	4	1.5	1	1	III
	A	5	1	1	1	I
	B	3.5	1.5	1	1	II
	C	3	1.5	1.5	1	III

Summary:

<b>Substrates:</b>	Granite
<b>Contaminants:</b>	Odor

## CLEANING LABORATORY EVALUATION SUMMARY

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Clorox Company	Fresh Step Cat Litter Box Cleaner	100		<input checked="" type="checkbox"/>	
American Blending & Filling	Fresh Step Carpet Powder Blend	100		<input checked="" type="checkbox"/>	

**Conclusion:**

Although Clorox Fresh Step Cat Litter Box Cleaner removed almost all the urine order by two to four sprays of the cleaner, Fresh Step Carpet Powder Blender was immediately effective and most efficient at removing the urine odor from cat litter with one gram in 3/4 cup of cat litter.