CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2023

DateRun: 10/06/2023

Experimenters: Alexander Symko, Amelia Wagner, Siddhant Trivedi

ClientType: Cleaner Manufacturer

ProjectNumber: Project #5

Substrates: Cat Litter

PartType: Coupon

Contaminants: Urine

Cleaning Methods: Immersion/Soak

Analytical Methods: Smell

Purpose: To evaluate the efficacy of Pathosan's product in its ability to reduce malodor compared to another product on the market.

Experimental Procedure: Seven clean 250 milliliters (ml) glass bottles, three per product and one control, were filled with six milliliters of cat urine. Three bottles were treated for each supplied product mixture for a total of three treatment cycles, with each treatment cycle consisting of two sprays of the respective product directly into the bottle. Following each treatment cycle, the bottles were swirled around so the cleaner mixed with the spoiled milk. The control bottle did not receive any treatment. Three panelists rated the malodor of the milk after each treatment cycle using the following rating key:

Rating	Description
1	No malodor
2	Slight malodor
3	Noticeable malodor
4	Strong malodor
5	Very strong malodor

An effective product needs to have an average rating of two or one. Each bottle, including the control, had to be rated a five before starting the test. After the first and second treatments, the bottles sat at room temperature to evaluate if there was an increase in malodor after 24 hours. Panelists rated the malodor of the urine after the overnight aging of the urine bottles before spraying a third and final treatment into the bottles for a final rating.

Results:

Product	Bottle	Initial	Spray 2	Spray 4	Spray 6	Overnight	Spray 2
Pathosan's ECA Odor Rempver 1.0	A	5	4.3	2.5	3.5	3.7	4
	B	5	4.5	4.3	4.2	4.2	3.5
	C	5	4	3	4.2	4.2	2.8
Febreeze Free Nature	D	5	2.5	1.5	2.2	3.2	2.2
	E	5	3	2.8	3.2	3.2	2.3
	F	5	2.1	1.7	3.2	2	1.7
Control	G	5	4.3	5	5	5	3.7

Summary:

Conclusion: Pathosan's ECA Odor Remover was not an effective product in removing malodor.