

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2023
 DateRun: 10/12/2023
 Experimenters: Amelia Wagner
 ClientType: Cleaner Manufacturer
 ProjectNumber: Project #5
 Substrates: Plastic, Chrome
 PartType: Coupon
 Contaminants: SSL Soil 1 Bathroom Soap Scum
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric
 Purpose: To evaluate the efficacy of Pathosans's cleaner in removing bathroom scum compared to another bathroom cleaner on the market.

Experimental Procedure: Three coupons for each substrate for each cleaner were weighed for initial weights (total of 12 coupons). About 0.15-0.2 g of SSL Bathroom Scum soil that was made previously was put onto the coupons and was left to dry overnight (24-hour dry time). The following day, dirty weights were taken and recorded. Three coupons of the same substrate were placed in the SLW Machine; there was 3 sprays per Wypall (one Wypall per substrate, per cleaner) and the SLW Machine was run for 20 cycles (30 seconds of cleaning). The coupons were taken out and left to dry for another 24 hours. After the 24 hours, they were weighed again for final weights.

Results:

Cleaner	Coupon	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Pathosans ECA Cleaner Formula	Chrome	0.0271	0.0099	63.47	70.75	77.79
		0.0188	0.0035	81.38		
		0.0092	0.0030	67.39		
	Plastic	0.0075	0.0004	94.67	84.82	
		0.0086	0.0010	88.37		
		0.0014	0.0004	71.43		
Lysol Power Bathroom Cleaner	Chrome	0.0100	0.0039	61.00	57.69	57.12
		0.0172	0.0083	51.74		
		0.0257	0.0102	60.31		
	Plastic	0.0091	0.0069	24.18	56.55	
		0.0078	0.0017	78.21		
		0.0721	0.0236	67.27		

Summary:

Conclusion: The Pathosans ECA cleaner is an effective cleaner in removing bathroom scum from the chrome and plastic. The ECA Cleaner worked better on plastic than chrome, but outperformed the Lysol Power Bathroom Cleaner on both substrates.