

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2019

DateRun: 10/30/2019

Experimenters: Zoe Lawson, Othon Pagounes, Tuan Le, Tatyanna Moreland Junior

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics, Plastic, Chrome

PartType: Coupon

Contaminants: Films, Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To evaluate two cleaners on the effectiveness of removing bathroom soil from ceramic, plastic, and chrome surfaces.

Experimental Procedure: Eighteen pre-weighed coupons, three of each substrate for each cleaner were contaminated with 0.5 grams of bathroom soil (28.6% All-in-one Shampoo & Conditioner, 21.4% Dry Skin lotion, 21.4% Liquid Hand Soap, 14.3% Liquid Body Wash, 7.2% Deodorant Bar Soap, 7.1% Water). The coupons were aged for 24 hours at room temperature (68 F) before recording dirty weights. Three coupons of the same substrate were placed in the Straight-Line Washability (SLW) unit and a Kimberly-Clark Wypall reinforced paper towel was attached to the cleaning sled. The Wypall and coupons were treated with two sprays of the cleaning solution and cleaned for 20 cycles (equivalent of 30 seconds cleaning). Coupons were air dried at room temperature (68 F) and final weights were recorded.

Results:	Cleaner	Substrate	Initial Weight of Cont.	Final Weight of Cont.	%Cont. Removed	Average	Overall Average % Cont. Removed
	Mrs. Meyers Lavender Tub & Tile	Ceramic	0.530	0.010	98.11	97.82	90.35
			0.520	0.010	98.08		
			0.730	0.020	97.26		
		Plastic	0.112	0.037	66.82	75.62	
			0.115	0.018	84.20		
			0.103	0.025	75.85		
		Chrome	0.548	0.015	97.25	97.62	
			0.453	0.011	97.57		
			0.512	0.010	98.05		
	Cleanyst Tub & Tile	Ceramic	0.593	0.005	99.14	98.78	98.84
			0.506	0.005	99.07		
			0.382	0.007	98.12		
		Plastic	0.601	-0.006	101.00*	99.32	
			0.597	0.004	99.33		
			0.559	0.013	97.64		
Chrome		0.668	0.010	98.53	98.42		
		0.559	0.009	98.48			
		0.478	0.008	98.241			

Summary:	Substrates:	Ceramics, Plastic, Chrome				
	Contaminants:	Films, Soaps				
	Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
	Mrs Myers Clean Day	Mrs Meyers Lavender Tub and Tile	100	90.53	<input checked="" type="checkbox"/>	
	Cleanyst	Cleanyst Tub and Tile	100	98.84	<input checked="" type="checkbox"/>	

Conclusion: The Cleanyst Tub & Tile Cleaner solution was more effective than the comparative product.