

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2020
 DateRun: 01/24/2020
 Experimenters: Tuan Le, Harry Rankin
 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 the effectiveness of the Mrs. Meyers Clean Day Lavender Tub & Tile Cleaner and Cleanyst Free & Clear Tub & Tiles Cleaner on the removal of bathroom soil on various surfaces.

Experimental Procedure: Eighteen pre-weighed coupons, three of each substrate per cleaner, were each contaminated with one gram of bathroom soil (28.6% All-in-one shampoo and 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 dirty weights were recorded after the coupons had dried for 24 hours at room temperature (68 F). Three coupons of the same substrate were aligned into a Single Line Washing Unit (SLW) with The Wypall X60 attached to the cleaning sled. The Wypall X60 reinforced wipe along with the coupons were all sprayed three times with the cleaner and then allowed to soak for 30 seconds. Afterwards the Single Line Washing Unit (SLW) was activated and cleaned for 20 cycles. The clean coupons were all then allowed to dry overnight at room temperature before the final weights were recorded.

Results:

Cleaner	Coupon Type	Initial wt. of cont.	Final wt. of cont.	%Cont. Removed	% Average	% Overall
Mrs. Meyers Clean Day Lavender Tub & Tile Cleaner	Ceramic	0.0936	0.0095	89.85	89.38	65.70
		0.1062	0.0101	90.49		
		0.2006	0.0245	87.79		
	Plastic	0.3697	0.1868	49.47	47.55	
		0.4208	0.2129	49.41		
		0.3420	0.1923	43.77		
	Chrome	0.2210	0.0715	67.65	60.16	
		0.2959	0.1023	65.43		
		0.2725	0.1433	47.41		
Cleanyst Free & Clear Tub & Tiles Cleaner	Ceramic	0.2225	0.1002	54.97	46.01	43.06
		0.2763	0.1726	37.53		
		0.3826	0.2084	45.53		
	Plastic	0.4444	0.3098	30.29	31.11	
		0.3579	0.2709	24.31		
		0.3540	0.2169	38.73		
	Chrome	0.3569	0.2024	43.29	52.05	
		0.2056	0.0816	60.31		
		0.2909	0.1380	52.56		

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	65.70	<input type="checkbox"/>	
Cleanyst	Cleanyst Tub and Tile	100	43.06	<input type="checkbox"/>	

Conclusion: Both cleaners were ineffective at removing bathroom soil on a variety of surfaces.