

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2020
 DateRun: 06/22/2020
 Experimenters: Alicia McCarthy, Hayley Byra
 ClientType: Cleaner Manufacturer
 ProjectNumber: Project #1
 Substrates: Glass/Quartz, Wood, Marble, Granite
 PartType: Coupon
 Contaminants: Hucker's Soil
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric, Visual

Purpose: To evaluate the effectiveness of all purpose cleaners at the removal of Hucker's soil.

Experimental Procedure: Two cleaners (409 All Purpose and L'AVANT All Purpose) were received "Ready to Use" (RTU). Twenty four pre-weighed coupons, three of each substrate per cleaner, were soiled with one gram of Hucker's Soil (Evaporated milk 26.5%, Creamy Peanut Butter 17%, Salted Butter 17%, Stone ground wheat flour 17%, Linseed oil 2.25%, Saline solution 5.25%, India Ink 6.8%, Lemon Juice 8.2%) and aged for 2 hours at room temperature (68°F). Dirty weights were recorded before placing three coupons of the same substrate onto the Straight Line Washability (SLW) unit. A KC Wypall was attached to the SLW sled and treated with two sprays of the same cleaning solution. The cleaning unit was run for 20 cycles (equivalent of 30 seconds of manual cleaning). Coupons were air dried at room temperature (68°F) overnight before final weights were recorded.

Results:

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Clorox Company 409 Multipurpose	Glass/ Mirrored	0.1807	0.0758	58.05	68.51	58.94
		0.2106	0.0463	78.02		
		0.2001	0.0611	69.47		
	Marble	0.1930	0.0443	77.05	72.85	
		0.1885	0.0458	75.70		
		0.1816	0.0621	65.80		
	Granite	0.1896	0.0429	77.37	81.21	
		0.1895	0.0351	81.48		
		0.1965	0.0299	84.78		
	Wood	0.1600	0.1600	0.00	13.18	
		0.1800	0.1300	27.78		
		0.1700	0.1500	11.76		
ANR Inc. L'AVANT Multipurpose	Glass/ Mirrored	0.1894	0.0246	87.01	89.64	56.08
		0.2011	0.0259	87.12		
		0.2170	0.0113	94.79		
	Marble	0.1830	0.0526	71.26	56.63	
		0.0573	0.0396	30.89		
		0.1860	0.0600	67.74		
	Granite	0.1595	0.0477	70.09	75.50	
		0.1906	0.0408	78.59		
		0.2006	0.0445	77.82		
	Wood	0.1700	0.1800	-5.88	2.56	
		0.2000	0.2300	-15.00		
		0.2100	0.1500	28.57		

Summary:

Substrates:	Glass/Quartz, Wood, Marble, Granite				
Contaminants:	Hucker's Soil				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Clorox Company	409 (Multi-Surface Cleaner)	100	58.94	<input type="checkbox"/>	
L'AVANT Collective	L'AVANT Collective All Purpose Cleaner	100	56.08	<input type="checkbox"/>	

Conclusion:

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Neither of the cleaners were effective at removing Hucker's soil on glass, marble, granite, and wood.