CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2021
DateRun:	08/23/2021
Experimenters:	Ross Goding, Edward Judge
ClientType:	Lab
ProjectNumber:	Project #4
Substrates:	Ceramics, Plastic, Painted metal
PartType:	Coupon
Contaminants:	Hucker's Soil
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric, Visual
Purpose:	To evaluate the effectiveness of Soft Scrub with Oxi in the removal of Hucker's Soil from various substrates.
Experimental Procedure:	A Soft scrub with Oxi solution was created by mixing 1 part Soft Scrub with 9 parts water. Then, 3 coupons of each substrate (ceramic, plastic, painted metal) were collected and initial weights were taken. Hucker's Soil (Creamy Peanut Butter, Salted Butter, Wheat gluten, Egg Yolk, Evaporated milk, DI water, Printer's ink with boiled linseed oil, India Ink, Saline Solution) was applied to each coupon and allowed to air dry for 2 hours. After the 2 hour dry time, the weights of the newly contaminated coupons were measured. All coupons were placed into a Gardner-scrub Abrasion Tester machine. Wypall cleaning cloths were attached to each of the 3 cleaning blocks used for the test. Each Wypall cloth and all coupons received 2 sprays of the Soft Scrub with Oxi solution and the Gardner-scrub Abrasion Tester was run for 20 repetitions, simulating 20 manual wipes. Once cleaning concluded, the cleaned coupons were allowed to air dry for 24 hours. After 24 hours, the weights of the cleaned coupons were measured.

Results:

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Soft Scrub with Oxi	Ceramic	0.4231	0.0056	98.68	96.57	96.16
		0.4305	0.0182	95.77		
		0.5906	0.0217	96.33		
	Plastic	0.4419	0.0199	95.50	95.40	
		0.3988	0.0181	95.46		
		0.4922	0.0234	95.25		
	Painted Metal	0.4832	0.0060	98.76	96.52	
		0.4367	0.0190	95.65		
		0.5195	0.0252	95.15		

Summary:

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Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Henkel Corporation	Soft Scrub with Oxi	1:9	96.16	☑	Soft Scrub with Oxi was effective in the removal of Hucker's Soil from various substrates.

Conclusion: Soft Scrub with Oxi was successful in the removal of Hucker's Soil from ceramic, plastic, and painted metal substrates.