CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 07/25/2021

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 test the effectiveness of Soft Scrub All Purpose in the removal of Hucker's Soil from various substrates.

Experimental Procedure: A Soft Scrub All Purpose solution was created by mixing 1 part Soft Scrub and 2 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 All Purpose 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:

Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Ceramic	0.1068	0.0049	95.41	88.73	87.49
	0.1004	0.0097	90.34		
	0.1149	0.0133	88.42		
Plastic	0.5125	0.0986	80.76	88.56	
	0.6870	0.0518	92.46		
	0.7648	0.0577	92.46		
Painted Metal	0.1993	0.0617	69.04	85.18	
	0.1294	0.0085	93.43		
	0.1571	0.0109	93.06		

Summary:

Substrates:	Ceramics, Plastic, Painted metal				
Contaminants:	Hucker's Soil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Henkel Corporation	Soft Scrub Total All Purpose Cleaner	1/3	87.49	☑	Soft Scrub All Purpose was effective in the removal of Hucker's Soil from various substrates.

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