

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 11/15/2021

Experimenters: Nicole Kebler, Tatyanna Moreland Junior

ClientType: Lab

ProjectNumber: Project #5

Substrates: Ceramics, Plastic, Painted metal

PartType: Coupon

Contaminants: Hucker's Soil

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To evaluate the effectiveness for the removal of Huckers soil from ceramic, painted metal, and plastic using Bona cleaner.

Experimental Procedure: Three coupons of each substrate (ceramic, painted metal, and plastic) were collected and initial weights were taken. Huckers soil was applied to each coupon and allowed to air dry for 24 hours. After the 2 hour dry time, the weights of the newly contaminated coupons were measured. All coupons were placed into a Straight-Line Washability (SLW) machine. A KC Wypall cleaning cloth was attached to the cleaning block used for the test. The Wypall cloth and all coupons received 2 sprays of the Bona Cleaner and the SLW machine 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: Bona was effective at removing Huckers soil from ceramic and plastic with an average of 91% removal for ceramic and 92% removal for plastic. There was some soil left on the painted metal coupons and had an average effectiveness of 83% removal.

Substrate	Initial wt. of cont.	Final wt. of cont	Average	Combined Average
Ceramic	0.1112	0.0077	93.08	91.02
	0.1117	0.0116	89.62	
	0.1028	0.0099	90.37	
Painted Metal	0.1056	0.0146	86.17	83.03
	0.1296	0.0210	83.80	
	0.1053	0.0220	79.11	
Plastic	0.1241	0.0085	93.15	92.12
	0.1484	0.0093	93.73	
	0.1208	0.0127	89.49	

Summary:

Conclusion: Bona was effective for the removal of Huckers soil from ceramic and plastic, but left behind some soil on painted metal.