CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2021
DateRun:	11/10/2021
Experimenters:	Zoe Lawson, 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 removal of Huckers soil from ceramic, painted metal and plastic using Puracy 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 24 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 Puracy 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:	Puracy cleaner was effective for plastic and ceramic and left minor amounts of soil left on painted metal. It was 92% effective for plastic, 87% effective for ceramic and 77% effective for painted metal.

Substrate	Initial wt. of cont.	Final wt. of cont	Average	Combined Average
Ceramic	0.1062	0.0196	81.54	87.36
	0.1165	0.0125	89.27	
	0.1132	0.0099	91.25	
Painted Metal	0.1245	0.0274	77.99	77.20
	0.1581	0.0404	74.45	
	0.1041	0.0217	79.15	
Plastic	0.0965	0.0068	92.95	91.56
	0.0836	0.0089	89.35	
	0.1021	0.0078	92.36	

Summary:

Conclusion: Puracy was effective for the removal of Huckers soil from ceramic and plastic and would need an additional wipe to remove all soil from painted metal.