CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 10/20/2021

Experimenters: Nicole Kebler, Tatyanna Moreland Junior

ClientType: Lab

ProjectNumber: Project #5

Substrates: Ceramics, Plastic, Chrome

PartType: Coupon

Contaminants: Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: To test Libman Multi-Surface Disinfecting Cleaner for the removal of bathroom soil on ceramic, chrome and plastic.

Experimental Procedure: Three coupons of each substrate (ceramic, chrome, plastic) were collected and initial weights were taken. Bathroom soil (28.6% All-in-one shampoo and conditioner, 21.4% Dry skin lotion, 21.4% Liquid Hand Soap, 14.3% Liquid body wash, 7.2% Deodorant bar soap, 7.1% Water) 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 Libman 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: Overall Libman Cleaner removed the soil from the substrate and was most effective on Plastic at 91% removal. Chrome and Ceramic were around 80% removal. visually the coupons looked clean with minor residue left over.

Cleaner	Substrate	Initial wt. of cont	Final wt. of cont	% Removal	Average
Libman	Ceramic	0.0486	0.0088	81.89	78.05
		0.0505	0.0092	81.78	
		0.0342	0.0101	70.47	
	Chrome	0.0582	0.0095	83.68	81.61
		0.0445	0.0062	86.07	
		0.0313	0.0078	75.08	
	Plastic	0.065	0.0091	86.00	90.79
		0.0727	0.0155	78.68	
		0.0442	-0.0034	107.69	

Summary:

Conclusion: Libman Multi-Surface Disinfecting Cleaner performed the best on plastic and visually was still effective on chrome and ceramic which had minor filming left over on the surface.