

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 11/10/2021

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: Gravimetric, Visual

Purpose: To test the effectiveness for the removal of bathroom soil from ceramic, chrome, and plastic using Bona cleaner.

Experimental Procedure: Three coupons of each substrate (ceramic, chrome, and plastic) were collected and initial weights were taken. Bathroom 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 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 had the highest removal effectiveness for chrome at 86%. Plastic substrate averaged at 83% removal and ceramic averaged at 81% removal. Visually there was minimal soil left on the edges of both the ceramic and plastic coupons, additional wiping would have removed it from the sides.

Substrate	Initial wt. of cont.	Final wt. of cont	Average	Combined Average
Ceramic	0.1334	0.0261	80.43	81.21
	0.1748	0.0324	81.46	
	0.1515	0.0277	81.72	
Chrome	0.1083	0.0114	89.47	86.27
	0.1450	0.0206	85.79	
	0.1913	0.0315	83.53	
Plastic	0.1532	0.0242	84.20	82.76
	0.1144	0.0139	87.85	
	0.1787	0.0425	76.22	

Summary:

Conclusion: Bona was effective for the removal of bathroom soil from chrome, ceramic, and plastic substrates.