

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021
DateRun: 11/09/2021
Experimenters: Nicole Kebler
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 removal of bathroom soil from ceramic, chrome, and plastic using the Puracy 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 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: There was soil left on the ceramic coupons and had a 62% total removal. Chrome and plastic coupons were more effective with an average of 85% removal for chrome and 73% removal for plastic.

| Substrate | Initial wt. of cont. | Final wt. of cont | Average | Combined Average |
|-----------|----------------------|-------------------|---------|------------------|
| Ceramic | 0.1577 | 0.0799 | 49.33 | 61.69 |
| | 0.1622 | 0.0594 | 63.38 | |
| | 0.1631 | 0.0451 | 72.35 | |
| Chrome | 0.2384 | 0.0426 | 82.13 | 85.44 |
| | 0.1059 | 0.0156 | 85.27 | |
| | 0.0992 | 0.0110 | 88.91 | |
| Plastic | 0.2152 | 0.0437 | 79.69 | 73.37 |
| | 0.1212 | 0.0134 | 88.94 | |
| | 0.2226 | 0.1080 | 51.48 | |

Summary:

Conclusion: Puracy was effective at removing bathroom soil from chrome and plastic but left behind some soil on the ceramic substrate.