

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021
 DateRun: 12/14/2021
 Experimenters: Zoe Lawson
 ClientType: Lab
 ProjectNumber: Project #7
 Substrates: Glass/Quartz, Chrome
 PartType: Coupon
 Contaminants: SSL Soil 2 Glass Soap Scum
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric

Purpose: Control testing to monitor glass soil consistency.

Experimental Procedure: Nine pre-weighed coupons, three of each substrate per cleaner, were contaminated with ~0.5 grams of glass soil (Water 51.5%, Hair gel 25.6%, Toothpaste 10.4%, Shaving cream 5.3%, Hair spray 3.7%, Spray deodorant 3.5%) distributed onto each coupon. The dirty weights were recorded after the coupons had dried for 24 hours at room temperature (68 F). Two coupons of the same substrate were aligned into a Single Line Washing Unit (SLW) with The Wypall X60 attached to the cleaning sled. The Wypall X60 reinforced wipe along with the coupons were all sprayed two times with the cleaner and then allowed to soak for 30 seconds. Afterwards the Single Line Washing Unit (SLW) was activated and cleaned for 20 cycles. The clean coupons were all then allowed to dry overnight at room temperature before the final weights were recorded.

Results:

| Cleaner | Substrate | Initial wt of cont. | Final wt of cont. | %Cont Removed | % AVG | % Overall |
|---------|-----------|---------------------|-------------------|---------------|-------|-----------|
| Water | Mirror | 0.5671 | 0.1058 | 81.34 | 81.68 | 82.55 |
| | | 0.6592 | 0.1125 | 82.93 | | |
| | | 0.6172 | 0.1188 | 80.75 | | |
| | Glass | 0.5955 | 0.1197 | 79.90 | 80.03 | |
| | | 0.5377 | 0.1055 | 80.38 | | |
| | | 0.5581 | 0.1126 | 79.82 | | |
| | Chrome | 0.6418 | 0.0969 | 84.90 | 85.93 | |
| | | 0.6380 | 0.0804 | 87.40 | | |
| | | 0.6202 | 0.0899 | 85.50 | | |

Summary:

Conclusion: The overall removal percentage for this control test was 82.55%.