

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021
DateRun: 11/04/2021
Experimenters: Nicole Kebler
ClientType: Lab
ProjectNumber: Project #5
Substrates: Glass/Quartz, Other, Chrome
PartType: Coupon
Contaminants: Glass
Cleaning Methods: Manual Wipe
Analytical Methods: Gravimetric, Visual

Purpose: To test Ever Spring for the removal of glass soil on chrome, mirror and glass substrate.

Experimental Procedure: Three coupons of each substrate (glass, mirror and chrome) were collected and initial weights were taken. Glass 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 Ever Spring 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: The Ever Spring cleaner was effective at removing glass soil from all three substrates. It had an average effectiveness of 96% for chrome, 93% for mirror and 93% for glass.

| Substrate | Initial wt. of cont. | Final wt. of cont | Average | Combined Average |
|-----------|----------------------|-------------------|---------|------------------|
| Chrome | 0.0802 | 0.0020 | 97.51 | 96.07 |
| | 0.0779 | 0.0013 | 98.33 | |
| | 0.0733 | 0.0056 | 92.36 | |
| Mirror | 0.0460 | 0.0047 | 89.78 | 92.70 |
| | 0.0485 | 0.0030 | 93.81 | |
| | 0.0490 | 0.0027 | 94.49 | |
| Glass | 0.0399 | 0.0051 | 87.22 | 92.74 |
| | 0.0619 | 0.0028 | 95.48 | |
| | 0.0537 | 0.0024 | 95.53 | |

Summary:

Conclusion: Ever Spring was effective at removing glass soil from chrome, mirror and glass substrates.