

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 11/10/2021

Experimenters: Nicole Kebler, Tatyanna Moreland Junior

ClientType: Lab

ProjectNumber: Project #5

Substrates: Glass/Quartz, Other, Chrome

PartType: Coupon

Contaminants: Glass

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To evaluate the effectiveness of the removal of glass soil from chrome, mirror, and glass using Honest cleaner.

Experimental Procedure: Three coupons of each substrate (chrome, glass, and mirror) 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 Honest 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: Glass had the highest percentage removal with an effectiveness of 95%. Chrome had an average of 92% and mirror had an effectiveness of 85%. All coupons visually looked like the soil was completely removed from the substrate.

| Substrate | Initial wt. of cont. | Final wt. of cont | Average | Combined Average |
|-----------|----------------------|-------------------|---------|------------------|
| Glass | 0.0143 | 0.0005 | 96.50 | 94.71 |
| | 0.0277 | 0.0017 | 93.86 | |
| | 0.0352 | 0.0022 | 93.75 | |
| Mirror | 0.0492 | 0.0034 | 93.09 | 84.91 |
| | 0.0158 | 0.0046 | 70.89 | |
| | 0.0476 | 0.0044 | 90.76 | |
| Chrome | 0.0220 | 0.0028 | 87.27 | 92.34 |
| | 0.0452 | 0.0025 | 94.47 | |
| | 0.0572 | 0.0027 | 95.28 | |

Summary:

Conclusion: Honest cleaner was effective for the removal of glass soil from all three substrates.