

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021
 DateRun: 11/11/2021
 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 Bona 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 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 cleaner was effective for the removal of glass soil from all three substrates. It had an average effectiveness of 93% for chrome, 92% for mirror and 91% for glass.

| Substrate | Initial wt. of cont. | Final wt. of cont | Average | Combined Average |
|-----------|----------------------|-------------------|---------|------------------|
| Chrome | 0.1010 | 0.0072 | 92.87 | 92.89 |
| | 0.0905 | 0.0075 | 91.71 | |
| | 0.1100 | 0.0065 | 94.09 | |
| Mirror | 0.1025 | 0.0109 | 89.37 | 91.89 |
| | 0.0826 | 0.0056 | 93.22 | |
| | 0.1057 | 0.0073 | 93.09 | |
| Glass | 0.0677 | 0.0079 | 88.33 | 91.07 |
| | 0.0756 | 0.0064 | 91.53 | |
| | 0.0750 | 0.0050 | 93.33 | |

Summary:

Conclusion: Bona was effective for the removal of glass soil from chrome, glass, and mirror.