# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 07/18/2021

Experimenters: Ross Goding, Edward Judge

ClientType: Lab

ProjectNumber: Project #4

Substrates: Glass/Quartz, Other, Chrome

PartType: Coupon

Contaminants: Glass

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To test the effectiveness of Cleaning Vinegar in the removal of SSL Soil 2 Glass Soil from various substrates.

Experimental Procedure: A Cleaning Vinegar solution was gathered to begin testing. Then, 3 coupons of each substrate (chrome, glass, mirror) were collected and initial weights were taken. SSL Soil 2 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 Gardner-scrub Abrasion Tester machine. Wypall cleaning cloths were attached to each of the 3 cleaning blocks used for the test. Each Wypall cloth and all coupons received 2 sprays of the Cleaning Vinegar solution and the Gardner-scrub Abrasion Tester 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:

| Cleaner | Substrate | Initial wt of cont. | Final wt of cont. | %Cont Removed | % AVG | % Overall |
|---|---|---|---|---|---|---|
| Cleaning Vinegar | Chrome | 0.1055 | 0.0044 | 95.83 | 89.46 | 93.14 |
| | | 0.3700 | 0.0042 | 98.86 | | |
| | | 0.2261 | 0.0814 | 64.00 | | |
| | Glass | 0.5583 | 0.0047 | 99.16 | 95.44 | |
| | | 0.7716 | 0.0039 | 99.49 | | |
| | | 0.7667 | 0.0946 | 87.66 | | |
| | Mirror | 0.3955 | 0.0047 | 98.81 | 94.52 | |
| | | 0.5424 | 0.0059 | 98.91 | | |
| | | 0.6009 | 0.0851 | 85.84 | | |

Summary:

| **Substrates:** | Glass/Quartz, Other, Chrome | | | | |
|---|---|---|---|---|---|
| **Contaminants:** | Glass | | | | |
| **Company Name:** | **Product Name:** | **Conc.:** | **Efficiency:** | **Effective:** | **Observations:** |
| Acros Organic | Acetic Acid | | 93.14 | ☐ | |

Conclusion: Cleaning Vinegar showed success in the removal of Glass Soil from chrome, glass, and mirror substrates.