

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2017

DateRun: 12/20/2017

Experimenters: Alicia McCarthy, Hayley Byra

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Glass/Quartz, Chrome

PartType: Coupon

Contaminants: Films, Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To compare the effectiveness of removing Bathroom soil from a variety of surfaces using the supplied cleaning products.

Experimental Procedure: Eighteen preweighed coupons, three for each substrate, were soiled with 1g of Glass soil (51.5% water, 25.6% hair gel, 10.4% toothpaste, 5.3% shaving cream, 3.7% hair spray, 3.5% spray deodorant) using a swab. Coupons air dried at room temperature (68F) for 24 hours before recording dirty weights. A sponge provided by EcoEgg was used to manually clean with both the supplied and comparative product. The sponge was saturated once with deionized water before rubbing it into the EcoEgg hard surface cleaner in a circular motion for five seconds. Coupons were cleaned one at a time for 30 seconds in a circular motion with a reapplication of the cleaner between each coupon. A dime sized drop of the comparative product was applied directly to the coupons one at a time and cleaned with a wet sponge for 30 sections in a circular motion. The coupons were dried by wiping once with a microfiber towel before taking clean weights and final observations.

## Results:

| Cleaner                                       | Substrate | Initial<br>wt. of<br>cont. | Final<br>wt. of<br>cont. | %Cont.<br>Removed | Average<br>% | %<br>Overall |
|---|-----------|----------------------------|--------------------------|-------------------|--------------|--------------|
| Hard<br>Surface<br>Cleaner<br>Citrus<br>Burst | Glass     | 0.1424                     | 0.0004                   | 99.72             | 96.81        | 92.76        |
|   |           | 0.1199                     | 0.0004                   | 99.67             |              |              |
|   |           | 0.1396                     | 0.0125                   | 91.05             |              |              |
|   | Chrome    | 0.1509                     | 0.0200                   | 86.75             | 86.87        |              |
|   |           | 0.1535                     | 0.0164                   | 89.32             |              |              |
|   |           | 0.1522                     | 0.0235                   | 84.56             |              |              |
|   | Mirror    | 0.1474                     | 0.0086                   | 94.17             | 94.60        |              |
|   |           | 0.1529                     | 0.0027                   | 98.23             |              |              |
|   |           | 0.1547                     | 0.0133                   | 91.40             |              |              |
| Soft<br>Scrub                                 | Glass     | 0.1409                     | 0.0076                   | 94.61             | 95.41        | 96.41        |
|   |           | 0.1423                     | 0.0040                   | 97.19             |              |              |
|   |           | 0.1490                     | 0.0083                   | 94.43             |              |              |
|   | Chrome    | 0.1554                     | 0.0058                   | 96.27             | 95.02        |              |
|   |           | 0.1509                     | 0.0062                   | 95.89             |              |              |
|   |           | 0.1563                     | 0.0111                   | 92.90             |              |              |
|   | Mirror    | 0.1444                     | 0.0007                   | 99.52             | 98.81        |              |
|   |           | 0.1453                     | 0.0011                   | 99.24             |              |              |
|   |           | 0.1465                     | 0.0034                   | 97.68             |              |              |

## Observations:

Both cleaners easily removed the soil. EcoEgg's product left behind some residue after drying, but it looks like it could be easily removed by wiping a wet sponge on the surface.

## Summary:

|                      |                             |               |                    |                                     |                      |
|----------------------|-----------------------------|---------------|--------------------|-------------------------------------|----------------------|
| <b>Substrates:</b>   | Glass/Quartz, Chrome        |               |                    |                                     |                      |
| <b>Contaminants:</b> | Films, Soaps                |               |                    |                                     |                      |
| <b>Company Name:</b> | <b>Product Name:</b>        | <b>Conc.:</b> | <b>Efficiency:</b> | <b>Effective:</b>                   | <b>Observations:</b> |
| Eco Egg              | Hard Surface Cleaner Citrus | 100           | 92.76              | <input checked="" type="checkbox"/> |                      |
| Dial Professional    | Soft Scrub Lemon            | 100           | 96.41              | <input checked="" type="checkbox"/> |                      |

## Conclusion:

EcoEgg's Hard Surface Cleaner Citrus Burst is as effective as the comparison cleaning product at removing glass soil from glass, chrome, and mirror.