

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2017
 DateRun: 12/19/2017
 Experimenters: Alicia McCarthy, Hayley Byra
 ClientType: Cleaner Manufacturer
 ProjectNumber: Project #1
 Substrates: Vinyl Composite Tiles
 PartType: Coupon
 Contaminants: Greases, Oil, Food
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric, Light Meter

Purpose:

Experimental Procedure: A Spectro Guide Gloss-Color meter from BYK Gardner was used to measure baseline gloss readings from six preweighed coupons, three per cleaner before soiling with one gram of DCC-17 soil (33% vegetable shortening, 33% lard, 33% vegetable oil, 1% carbon lampblack) using a swab. Coupons air dried at room temperature (68 F) for 24 hours before recording dirty gloss readings and weight. 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 gloss readings and final weights.

Results:

L-Values

| Cleaner | Initial L | Dirty L | Final L | % DET | % AVG DET |
|-----------------------------------|-----------|---------|---------|--------|-----------|
| Hard Surface Cleaner Citrus Burst | 92.29 | 26.59 | 77.97 | 78.20 | 90.14 |
| | 85.72 | 20.49 | 82.78 | 95.49 | |
| | 81.82 | 18.68 | 79.75 | 96.72 | |
| Soft Scrub | 91.72 | 15.77 | 82.72 | 88.15 | 93.48 |
| | 90.61 | 29.08 | 85.82 | 92.22 | |
| | 88.01 | 23.93 | 88.06 | 100.08 | |

Gravimetric

| Cleaner | Initial wt of cont. | Final wt of cont. | %Cont. Removed | % Average |
|-----------------------------------|---------------------|-------------------|----------------|-----------|
| Hard Surface Cleaner Citrus Burst | 1.0077 | 0.0480 | 95.24 | 96.08 |
| | 1.1006 | 0.0305 | 97.23 | |
| | 1.0454 | 0.0441 | 95.78 | |
| Soft Scrub | 0.6776 | 0.0415 | 93.88 | 92.09 |
| | 1.1712 | 0.1366 | 88.34 | |
| | 1.0893 | 0.0647 | 94.06 | |

Summary:

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|----------------------|-----------------------------|---------------|--------------------|-------------------------------------|----------------------|
| Substrates: | Vinyl Composite Tiles | | | | |
| Contaminants: | Greases, Oil, Food | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Eco Egg | Hard Surface Cleaner Citrus | 100 | 96.08 | <input checked="" type="checkbox"/> | |
| Dial Professional | Soft Scrub Lemon | 100 | 92.09 | <input checked="" type="checkbox"/> | |

Conclusion:

EcoEgg's Hard Surface Cleaner Citrus Burst is as effective as the comparative cleaning product at removing DCC-17 from painted vinyl.