

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2017
 DateRun: 11/13/2017
 Experimenters: Kevin Smith, Justin Rainaud
 ClientType:
 ProjectNumber: Project #2
 Substrates: Vinyl Composite Tiles, Painted metal
 PartType: Coupon
 Contaminants: Carbon Deposits, Food
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric, Visual

Purpose: To evaluate supplied product for all purpose soil removal from steel and VCT surfaces.

Experimental Procedure: Pre-weighed painted steel, painted VCT coupons were soiled with one gram of DCC 17 soil (33% vegetable shortening, 33% lard, 33% vegetable oil, 1% carbon lampblack). The coupons dried for 24 hours at room temperature (68 F) before recording the dirty weights. Three coupons of the same substrate were placed onto the Gardner Straight Line Washability unit. A Wypall X60 reinforced wipe was attached to the cleaning sled and soaked with one spray of the cleaner. The supplied cleaner was diluted with one pack to 5 gallons of room temperature tap water, and the comparative cleaner was used at the supplied dilution. Each coupon was then sprayed once with the same cleaner. The cleaner penetrated for 30 seconds before cleaning in the SLW unit for 20 cycles (~40 seconds). Clean coupons were air dried at room temperature (68 F) overnight before recording final weights.

Results: **Table of Gravimetric Results:**

| Cleaner | Substrate | Initial wt. of cont. (g) | Final wt. of cont. (g) | % Cont. Removed | Average % Cont. Removed | Overall % Cont. Removed |
|--|---------------|--------------------------|------------------------|-----------------|-------------------------|-------------------------|
| Pak-it Heavy Duty Glass & Hard Surface Cleaner | Painted Steel | 0.7752 | 0.2374 | 69.38 | 81.42 | 85.83 |
| | | 1.1473 | 0.1343 | 88.29 | | |
| | | 1.0703 | 0.1436 | 86.58 | | |
| Oasis 255 Glass Cleaner | Painted VCT | 1.0838 | 0.0887 | 91.82 | 90.25 | 93.09 |
| | | 0.9645 | 0.0961 | 90.04 | | |
| | | 1.1040 | 0.1225 | 88.90 | | |
| Oasis 255 Glass Cleaner | Painted Steel | 0.9954 | 0.1069 | 89.26 | 88.93 | 93.09 |
| | | 1.2405 | 0.1051 | 91.53 | | |
| | | 1.0066 | 0.1410 | 85.99 | | |
| | Painted VCT | 0.8956 | 0.0303 | 96.62 | 97.25 | |
| | | 1.0038 | 0.0305 | 96.96 | | |
| | | 1.0960 | 0.0202 | 98.16 | | |

The comparative cleaner; Oasis 255 Glass Cleaner was more effective at cleaning DCC 17 soil from painted steel and painted VCT surfaces.

Summary:

| Substrates: | | Vinyl Composite Tiles, Painted metal | | | |
|----------------------|-------------------------------------|--------------------------------------|-------------|-------------------------------------|---------------|
| Contaminants: | | Carbon Deposits, Food | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Big 3 Packaging | Pak-It Glass & Hard Surface Cleaner | 1pack / 5 gallon | 85.83 | <input checked="" type="checkbox"/> | |
| EcoLab | Oasis 255 Glass Cleaner | 100% | 93.09 | <input checked="" type="checkbox"/> | |

Conclusion:

The Oasis 255 Glass Cleaner was more effective than the Glass and Hard Surface Cleaner, with respective removal rates of 85.83% and 93.09%.