CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005

DateRun: 08/15/2005

Experimenters: Jason Marshall

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics, Fiberglass, Chrome

PartType: Coupon

Contaminants: Films, Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To evaluate supplied products on three substrates for bathroom soap scum removal.

Experimental Procedure: Two supplied cleaning product were diluted to vendor recommended concentrations for bathroom cleaning. The product was diluted with DI water.

Six preweighed fiberglass, six ceramic and six chrome coupons were coated with SSL Soil 1 (Bathroom soap scum: Vaseline Dry Skin Lotion 21.4%, Dial Clean Rinsing Body Wash 14.3%, Market Basket Shampoo & Conditioner (Pert) 28.6%, Soft Soap Natural Liquid hand soap 21.4%, Coast Deodorant bar soap 7.2% and Water 7.1%) using a hand held swab and allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added.

Three coupons were placed into a Gardner Straight Line Washability unit. A Professional Painter's Rag was attached to the cleaning sled and soaked with 5-7 sprays of cleaning solutions. Each coupon was sprayed 7-10 times with the same cleaning solution. The cleaning unit was run for 20 cycles (~33 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded, efficiencies were calculated and recorded.

Results: Both products were not successful in removing SSL Soil 1 - Bathroom Soil from ceramic, fiberglass and chrome coupons. Table 1 lists the amount of soil applied and removed for each substrate and coupon.

Table 1. Soil Application and Removal

Cleaner	Initial wt	Final wt	% Removed
DFC 23 Ceramic	0.2137	0.0616	71.17
	0.2605	0.0888	65.91
	0.3234	0.0432	86.64
DFC 5 Ceramic	0.2299	0.0501	78.21
	0.1797	0.0460	74.40
	0.2459	0.0397	83.86
DFC 23 Fiberglass	0.1999	0.0389	80.54
	0.2308	0.0498	78.42
	0.2886	0.0379	86.87
DFC 5 Fiberglass	0.2560	0.0528	79.38
	0.2588	0.0424	83.62
	0.3541	0.0337	90.48
DFC 23 Chrome	0.1698	0.0086	94.94
	0.1032	0.0081	92.15
	0.1130	0.0086	92.39
DFC 5 Chrome	0.1059	0.0158	85.08
	0.2021	0.0185	90.85
	0.2014	0.0185	90.81

Summary:

Substrates:	Ceramics, Fiberglass, Chrome				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Cogent Environmental Solutions	DFC 23	0.4	83.23	☐	
Cogent Environmental Solutions	DFC 5	100	84.08	☐	

Conclusion: Both products will be retested at new dilutions based on vendor feed back to cleaning results obtained.

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