CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005

DateRun: 08/16/2005

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 re-evaluate two supplied products for glass soap scum removal from two substrates using new dilutions.

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: The DFC 23 removed over 90% of the contaminant while used at the higher concentration. The DFC 5 removed % of the contaminant while used at the lower concentration. The table below lists the amount of soil applied and removed from the coupons.

Substrate	Cleaner	Initial wt	Final wt	% Removed
Ceramic	DFC 23	0.1944	0.0245	87.40
		0.2456	0.0589	76.02
		0.2578	0.0273	89.41
	DFC 5	0.2095	0.0089	95.75
		0.0510	0.0018	96.47
		0.1671	0.0250	85.04
Fiber Glass	DFC 23	0.2021	0.0156	92.28
		0.2705	0.0172	93.64
		0.4175	0.0003	99.93
	DFC 5	0.2841	0.0083	97.08
		0.3371	0.0065	98.07
		0.1876	0.0134	92.86
Chrome	DFC 23	0.2103	0.0083	96.05
		0.1369	0.0085	93.79
		0.1366	0.0091	93.34
	DFC 5	0.2303	0.0171	92.57
		0.2562	0.0159	93.79
		0.2078	0.0147	92.93

Summary:

Substrates:	Ceramics, Fiberglass, Chrome				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Cogent Environmental Solutions	DFC 23	0.8	91.32	☑	
Cogent Environmental Solutions	DFC 5	5	93.84	☑	

Conclusion: Both products performed better at altered dilution ratios.