

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005  
 DateRun: 09/07/2005  
 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 resubmitted product for bathroom soap scum removal

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

Three preweighed fiberglass, three ceramic and three 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 5 removed 92% of the contaminant used at the 5 percent concentration. The table below lists the amount of soil applied and removed from the coupons.

Substrate	Initial wt	Final wt	% Removed
Ceramic	0.0877	0.0064	92.70
	0.0878	0.0040	95.44
	0.0945	0.0089	90.58
Fiberglass	0.1839	0.0062	96.63
	0.1208	0.0045	96.27
	0.0759	0.0044	94.20
Chrome	0.0640	0.0040	93.75
	0.0698	0.0071	89.83
	0.0914	0.0169	81.51

Summary:	<b>Substrates:</b>	Ceramics, Fiberglass, 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>
	Cogent Environmental Solutions	DFC 5	5	92.32	<input checked="" type="checkbox"/>	

Conclusion: The DFC was successful in removing over 85% of the bathroom soil from various substrates.