CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2007
DateRun:	10/29/2007
Experimenters:	Jason Marshall
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Ceramics, Plastic, Steel, Fiberglass, Chrome
PartType:	Coupon
Contaminants:	Films, Soaps, Hucker's Soil
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	To evaluate supplied glass cleaner on bathroom and all purpose soils.

Experimental Procedure:

The supplied cleaning product was used at full strength.

Preweighed fiberglass, ceramic and 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.

In addition, a set of preweighed fiberglass, ceramic and chrome coupons were coated with a fresh batch of SSL Soil 3 (Hucker's Soil: Distilled water 45.8%, Evaporated milk 13.8%, Creamy peanut butter 9.2%, Salted butter 9.2%, Stone ground wheat flour 9.2%, Egg yolk 9.2%, Printer's ink with boiled linseed oil 0.9% and Saline solution 2.7%.) 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 Kimberly-Clark WypAll X60 reinforced wipe 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 supplied product was effective at removing the all purpose soil but was not effective on the bathroom soil. The table lists the amount of soil added, the amount remaining, the efficiency for each coupon cleaned and the average removal from each substrate type.

Cleaner	Initial wt	Final wt	% Removed
DFC Glass - st -AP	0.2458	0.0139	94.34
	0.1331	0.0270	79.71
	0.2675	0.0519	80.60
DFC Glass - pl - AP	0.2743	0.0251	90.85
	0.2477	0.0250	89.91
	0.2593	0.0068	97.38
DFC Glass - ce - AP	0.1857	0.0275	85.19
	0.2165	0.0257	88.13
	0.2045	0.0598	70.76
DFC Glass - ce - BR	0.1709	0.0310	81.86
	0.2138	0.0694	67.54
	0.2137	0.0451	78.90
DFC Glass - ch - BR	0.1868	0.0474	74.63
	0.1949	0.0492	74.76
	0.2487	0.1514	39.12
DFC Glass - fg - BR	0.4074	0.1620	60.24
	0.3314	0.1602	51.66
	0.2781	0.0891	67.96

Summary:

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Substrates:	Ceramics, Plastic, Steel, Fiberglass, Chrome				
Contaminants:	Films, Soaps, Hucker's Soil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Cogent Environmental Solutions	DFC Glass	100	86.32	☑	All Purpose Soil
Cogent Environmental Solutions	DFC Glass	100	66.30	☐	Bathroom Soil

Conclusion: The glass cleaner removed over the 85% cut off point for the all purpose soil. It did not pass for the bathroom soil.