CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2006
DateRun:	02/06/2006
Experimenters:	Jason Marshall
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Ceramics, Fiberglass, Chrome
PartType:	Coupon
Contaminants:	Soaps
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	To evaluate supplied product for bathroom cleaning applications.

Experimental Procedure:

The supplied cleaning product was diluted to vendor recommended concentrations for bathroom cleaning using DI water (10%). 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 supplied product was effective on two of the three substrates for the bathroom soil used in this trial. The table below lists the amount of soil added, remaining and efficiency for each substrate. A comparison on one soil for water cleaning was also conducted for comparative purposes.

	Cleaner	Initial wt	Final wt	% Removed
Soil 1	Ceramic	0.6160	0.0452	92.66
		0.2605	0.0262	89.94
		0.3234	0.0226	93.01
	Fiberglass	0.1999	0.0354	82.29
		0.4608	0.1290	72.01
		0.5886	0.1333	77.35
	Chrome	0.1698	0.0177	89.58
		0.2021	0.0280	86.15
		0.2014	0.0182	90.96

Control

Water	Chrome	0.0640	0.0208	67.50
		0.0698	0.0197	71.78
		0.0914	0.0311	65.97

Summary:

Substrates:	Ceramics, Fiberglass, Chrome				
Contaminants:	Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Oxford Micelles	5009	10	85.99	☑	
Water	Water	100	68.42	☐	

Conclusion:

Despite having trouble with removing the soil from the fiberglass substrate, the overall efficiency of 5009 was above the 85% cut-off for effective cleaning.