CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2010
DateRun:	01/04/2010
Experimenters:	Jason Marshall
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Ceramics, Plastic, Steel
PartType:	Coupon
Contaminants:	Hucker's Soil
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	To evaluate the two supplied products for all purpose cleaning using manual cleaning.
Experimental Procedure:	The supplied cleaning products were used at the delivered concentrations. One product was tested at three concentrations (2, 1, 0.5%) and the second product was used at one dilution (1:600). Preweighed ceramic, plastic and painted steel coupons were coated with Hucker's Soil Formulation (Jif Creamy Peanut Butter 9.2%, Salted Butter 9.2%, Arrowhead Mills stone ground wheat flour 9.2%, Egg Yolk 9.2%, Evaporated milk 13.8%, Distilled water 45.8%, Printer's ink with boiled linseed oil 0.9%, Shaws saline solution 2.7%) using a handheld 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 Klark 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 solution was allowed to penetrate for 30 seconds followed by cleaning in the SLW unit for 20 cycles (~33 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded, and efficiencies were calculated and recorded.
Results:	The table lists the amount of soil added and the amount remaining after cleaning and the product efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
PC 120 2% ceramic			
	0.0943	0.004	95.76
	0.263	0.005	98.1
	0.1411	0.0033	97.66
PC 120 2% painted steel			
	0.1261	0.0184	85.41
	0.1503	0.0078	94.81
	0.0928	0.0108	88.36
PC 120 2% plastic			
	0.0845	0.0051	93.96
	0.0742	0.0054	92.72
	0.0396	0.0069	82.58
PC 120 1% ceramic			
	0.084	0.0044	94.76
	0.1118	0.0017	98.48
	0.0359	0.0039	89.14
PC 120 1% painted steel			
	0.2513	0.0066	97.37
	0.0889	0.0083	90.66
	0.0765	0.0108	85.88
PC 120 1% plastic			
	0.0573	0.0089	84.47
	0.0419	0.0033	92.12

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	0.07	0.0044	93.71
PC 120 0.5% ceramic			
	0.0762	0.0043	94.36
	0.0484	0.0082	83.06
	0.1137	0.0031	97.27
PC 120 0.5% painted steel			
	0.0546	0.015	72.53
	0.0796	0.0113	85.8
	0.1044	0.016	84.67
PC 120 0.5% plastic			
	0.067	0.0043	93.58
	0.0514	0.0034	93.39
	0.0368	0.002	94.57
PC 101 ceramic			
	0.1071	0.0069	93.56
	0.0761	0.0128	83.18
	0.0299	0.0057	80.94
PC 101 painted steel			
	0.1586	0.0221	86.07
	0.0596	0.0167	71.98
	0.0926	0.0174	81.21
PC 101 plastic			
	0.0719	0.0018	97.5
	0.0423	0.0027	93.62
	0.0374	0.0058	84.49
Alpha HP ceramic			
	0.6564	0.0229	96.51
	0.2883	0.0086	97.02
	0.3684	0.0095	97.42
Alpha HP painted steel			
	0.0972	0.0215	77.88
	0.14	0.0162	88.43
	0.1666	0.0085	94.9
Alpha HP plastic			
	0.1219	0.0027	97.79
	0.0538	0.0038	92.94
	0.0521	0.0052	90.02

Summary:

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Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Next-Gen Supply Group	PC 120 Peroxide Mulitsurface Cleaner	2	92.15	☑	
Next-Gen Supply Group	PC 120 Peroxide Mulitsurface Cleaner	1	91.84	☑	
Next-Gen Supply Group	PC 120 Peroxide Mulitsurface Cleaner	0.5	88.80	☑	
Next-Gen Supply Group	PC 101 Neutral and Glass Cleaner	0.167	85.84	☑	
JohnsonDiversey	Multi Surface Cleaner (Alpha HP)	15.6	92.54	☑	

Conclusion: Both of the products at all dilutions had an overall average efficiency over 85% and would be considered effective based on the TURI lab testing protocol for GS 37.