CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006

DateRun: 07/13/2006

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 run a second cleaning cycle for one of the supplied products for All-purpose cleaning

Experimental Procedure: One supplied cleaning products was used at full strength to clean the coupons previously contaminated with the 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%).

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 table lists the amount of soil added, the amount remaining and the percent removed for each coupon cleaned. The values from both rounds of cleaning are listed.

Cleaner	Initial wt	Final wt	% Removed
Cogent Sodium hypochlorite Steel	0.7091	0.0226	96.81
	0.5136	0.0527	89.74
	0.7826	0.0415	94.70
Round 2	0.7091	0.0050	99.29
	0.5136	0.0013	99.75
	0.7826	0.0051	99.35
Cogent Sodium hypochlorite Plastic	0.8569	0.0303	96.46
	1.0498	0.0299	97.15
	0.5279	0.0402	92.38
Round 2	0.8569	0.0018	99.79
	1.0498	0.0002	99.98
	0.5279	0.0007	99.87
Cogent Sodium hypochlorite Ceramic	0.6902	0.1802	73.89
	0.9517	0.2429	74.48
	0.8444	0.2760	67.31
Round 2	0.6902	0.1313	80.98
	0.9517	0.1735	81.77
	0.8444	0.2566	69.61

Summary:

Substrates:	Ceramics, Plastic, Steel				
Contaminants:	Hucker's Soil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Cogent Environmental Solutions	DFC Sodiumhypochlorite 0.02	100	92.27	☑	

Conclusion: The second cycle of cleaning improved the efficiency of the Sodium hypochlorite 0.02% solution. The effectiveness increased to 92.27% from 86.69%.