CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005

DateRun: 11/14/2005

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 supplied product on three substrates for Hucker's Soil removal.

Experimental Procedure: The supplied cleaning product was diluted with DI water to vendor recommended concentration for all purpose Cleaning (1.56%). Nine preweighed ceramic, nine plastic G-10 and nine 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 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. Photographs were taken.

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 product was successful in removing SSL Soil 3 - Hucker's Soil from ceramic, plastic and painted steel coupons. Table 1 lists the amount of soil applied and removed for each substrate and coupon.

Substrate	Initial wt	Final wt	% Removal
Ceramic	0.3366	0.0418	87.58
	0.2221	0.0408	81.63
	0.7275	0.2126	70.78
Plastic	0.318	0.0057	98.21
	0.3031	0.0077	97.46
	0.5339	0.0189	96.46
Steel	0.4478	0.0157	96.49
	0.7983	0.0138	98.27
	0.417	0.0162	96.12

Summary:

Substrates:	Ceramics, Plastic, Steel
Contaminants:	Hucker's Soil

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Cogent Environmental Solutions	DFC Degreaser	1.56	91.44	☑	

Conclusion: The product was successful in removing at least 85% of the applied soil.