

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004
 DateRun: 07/16/2004
 Experimenters: Jason Marshall
 ClientType: Chemical Company
 ProjectNumber: Project #1
 Substrates: Steel
 PartType: Coupon
 Contaminants: Greases, Dirt
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric, Photography
 Purpose: To evaluate supplied product on kitchen soil

Experimental Procedure: The supplied cleaning product was used at the supplied concentration. A second product, selected by the lab, was diluted with DI water to vendor recommended dilution (2.6) for general purpose cleaning.

Six preweighed ceramic were coated with SSL Soil 4 (Kitchen Soil: Crisco Shortening 35%, Maxwell House Slow Roast Coffee 1 tsp/4 oz 25%, Lipton The Brisk Tea, 1 bag/4 oz 25%, Garelick Farms Half and Half 5% and Synthetic Carpet Soil Mix 10%) 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 of the dirty coupons 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 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 cleaned coupons were photographed. Efficiencies were calculated and recorded.

Results: Both products were not effective in removing the soil with a manual wiping action. The table lists the amount of soil initially added and the amount remaining after cleaning and the product efficiency for each coupon cleaned. Dirty and clean pictures are also provided below. Longer cleaning times would benefit both products for this soil.

Cleaner	Initial wt	Final wt	% Removed
ion.a.Clean	0.2843	0.1361	52.13
	0.2792	0.1422	49.07
	0.6321	0.2544	59.75
Super H2O2	0.7481	0.5600	25.14
	0.7052	0.4880	30.80
	0.7496	0.4570	39.03

Summary:	Substrates:	Steel				
	Contaminants:	Greases, Dirt				
	Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
	Castle International	ion.a.Clean	100	53.65	<input type="checkbox"/>	
	Cleanline Products	H2O2 Super Citrus Concentrate	3	31.66	<input type="checkbox"/>	

Conclusion: The two products will be tested on SSL Soil 5 Carpet Soil.