

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004  
 DateRun: 07/16/2004  
 Experimenters: Jason Marshall  
 ClientType: Chemical Company  
 ProjectNumber: Project #1  
 Substrates: Chrome  
 PartType: Coupon  
 Contaminants: Films, Soaps  
 Cleaning Methods: Manual Wipe  
 Analytical Methods: Gravimetric, Photography  
 Purpose: To evaluate supplied product on bathroom 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 (4.7%) for bathroom cleaning.

Six preweighed chrome coupons were coated with SSL Soil 1 (Bathroom soap scum: All-in-one shampoo and conditioner 28.6%, Dry skin lotion 21.4%, Liquid hand soap 21.4%, Liquid body wash 14.3%, 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. 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 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.

Cleaner	Initial wt	Final wt	% Removed
ion.a.Clean	0.3161	0.0078	97.53
	0.3483	0.0061	98.25
	0.3051	0.0050	98.36
Super H2O2	0.3693	0.0131	96.45
	0.3700	0.0066	98.22
	0.2917	0.0062	97.87

Summary:	<b>Substrates:</b>	Chrome				
	<b>Contaminants:</b>	Films, Soaps				
	<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
	Castle International	ion.a.Clean	100	98.05	<input checked="" type="checkbox"/>	
	Cleanline Products	H2O2 Super Citrus Concentrate	5	97.51	<input checked="" type="checkbox"/>	

**Conclusion:** The two products will be tested on SSL Soil 2 Glass under similar conditions.