CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 11/24/2008

Experimenters: Jason Marshall, Junhee Cho

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Glass/Quartz, Chrome

PartType: Coupon

Contaminants: Films, Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To evaluate supplied product for glass cleaning.

Experimental Procedure: The supplied cleaning product was used at the supplied concentration (20:1). A second product, selected by the lab, was diluted with DI water to vendor recommended dilution (0.4%) for glass cleaning. Preweighed chrome coupons were coated with SSL Soil 2 (Glass soap scum: Water 51.5%, Hair gel 25.6%, Toothpaste 10.4%, Shaving cream 5.3%, Hair spray 3.7% and Spray deodorant 3.5%) 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 Clark Reinforced paper towel 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 5 cycles (~10 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 supplied product was effective in removing the glass soap scum 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.

Cleaner	Initial wt	Final wt	% Removed
H2O2-glass	0.0245	0.0021	91.43
	0.0317	0.0043	86.44
	0.0303	0.0038	87.46
H2O2-chrome	0.0510	0.0109	78.63
	0.0412	0.0076	81.55
	0.0344	0.0052	84.88
Green Works-glass	0.0378	0.0099	73.81
	0.0374	0.0067	82.09
	0.0455	0.0071	84.40
Green Works-chrome	0.0507	0.0104	79.49
	0.0454	0.0105	76.87
	0.0520	0.0105	79.81

Summary:

Substrates:	Glass/Quartz, Chrome				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Cleanline Products	H2O2 Super Citrus Concentrate	0.4	85.06	☑	
Clorox Company	Green Works Natural Glass Cleaner	100	79.41	☐	

Conclusion: The supplied product had an overall average efficiency greater than 85% and would be considered effective based on the SSL testing methodology.