CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 04/28/2008

Experimenters: Jason Marshall

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 products for glass cleaning

Experimental Procedure: The supplied cleaning product was used at the recommended concentrations (12oz/gallon ~ 9%). Two products were included for comparison and were used at the ready to use concentration.

Preweighed chrome and glass 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 Wypall X60 reinforced wipe 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 recorded.

Results: The supplied product worked better than the other two products selected for comparison, removing over 95% of the soap scum from both the glass and chrome surfaces. The table lists the amount of soil added and the amount remaining after cleaning and the product efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
Scout Glass	0.0307	0.0017	94.46
	0.0489	0.0019	96.11
	0.0431	0.0010	97.68
Scout Chrome	0.0520	0.0022	95.69
	0.0457	0.0023	94.97
	0.0640	0.0025	96.09
Kernel Clean Glass	0.0377	0.0026	93.10
	0.0490	0.0021	95.71
	0.0390	0.0046	88.21
Kernel Clean Chrome	0.0628	0.0070	88.85
	0.0485	0.0064	86.80
	0.0701	0.0085	87.87
Green Works Glass	0.0783	0.0059	92.46
	0.1183	0.0034	97.13
	0.1345	0.0028	97.92
Green Works Chrome	0.1021	0.0184	81.98
	0.0910	0.0147	83.85
	0.1186	0.0237	80.02

Summary:

Substrates:	Glass/Quartz, Chrome				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Scout Systems	Scout Glass & Surface Cleaner	9	95.84	☑	

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Franmar Chemical	Kernel Clean glass cleaner	100	90.09	☑	
Clorox Company	Green Works Glass and Surface Cleaner	100	88.89	☑	

Conclusion: The three products had overall average efficiencies over 85% and would be considered effective based on the SSL testing methodology.