

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003  
 DateRun: 07/31/2003  
 Experimenters: Jason Marshall, Heidi Wilcox  
 ClientType: State Agency  
 ProjectNumber: Project #2  
 Substrates: Glass/Quartz, Chrome  
 PartType: Coupon  
 Contaminants: Soaps  
 Cleaning Methods: Manual Wipe  
 Analytical Methods: Gravimetric

Purpose: To reevaluate selected cleaner for glass cleaning at vendor recommended dilution ratio.

Experimental Procedure: The supplied cleaning product was diluted to vendor recommended concentration for glass cleaning. The products was diluted with DI water. Three preweighed chrome and three glass coupons were coated with SSL Soil 2 (Glass soap scum: Colgate Regular shaving cream 5.3%, Arid Extra Extra Spray Deodorant 3.5%, Suave Naturals Flexible Hold hair spray 3.7%, Aleeda Texurizing hair gel 25.6% Colgate Total toothpaste 10.4%, Water 51.5%) by pump spraying the mix. The soil was 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 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 5 cycles (~9 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.

Product Dilution Ratio  
 Ramsey Free Fall 256:1

Results: The product was successful in removing the soil from the glass substrates. The table below lists the amount of soil applied and removed from the coupons.

Table 1. Soil Removal

Cleaner	Initial wt	Final wt	% Removed
Ramsey	0.0690	0.0031	95.51
Glass	0.0581	0.0009	98.45
	0.0658	0.0022	96.66
Ramsey	0.0711	0.0011	98.45
Chrome	0.0924	0.0054	94.16
	0.0881	0.0016	98.18

Summary:

<b>Substrates:</b>	Glass/Quartz, Chrome				
<b>Contaminants:</b>	Soaps				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Ramsey Company	Free Fall	0	96.90	<input checked="" type="checkbox"/>	Glass - 96.87, Chrome - 96.93

Conclusion: The product was successful at the vendor recommended dilution ratio.