

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006  
 DateRun: 03/30/2006  
 Experimenters: Jason Marshall  
 ClientType: Cleaner Manufacturer  
 ProjectNumber: Project #1  
 Substrates: Glass/Quartz, Chrome  
 PartType: Coupon  
 Contaminants: Soaps  
 Cleaning Methods: Manual Wipe  
 Analytical Methods: Gravimetric

Purpose: To reevaluate supplied product at a higher concentration for glass cleaning

Experimental Procedure: One of the supplied cleaning product was diluted to the vendor's new recommended concentration for glass cleaning using DI water (0.78%). 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.

Results: The supplied product removed over 96% of the soil when used at the increased concentration of 1/128. The table below list the amount of soil added, the amount reaming and the efficiency for each substrate.

Cleaner	Initial wt	Final wt	% Removed
Glass	0.0423	0.0015	96.45
	0.0266	0.0012	95.49
	0.0530	0.0005	99.06
Chrome	0.0455	0.0008	98.24
	0.0495	0.0022	95.56
	0.0348	0.0010	97.13

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>
Perma Inc	Geo Clean 180	0.78	96.99	<input checked="" type="checkbox"/>	

Conclusion: The Perma Geo Clean 180 was effective at the higher concentration.