CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2024
DateRun:	10/07/2024
Experimenters:	Amelia Wagner
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #2
Substrates:	Glass/Quartz, Chrome
PartType:	Coupon
Contaminants:	SSL Soil 2 Glass Soap Scum
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	To test the efficacy of the client's glass cleaning product against comparative glass cleaning market products.
Experimental Procedure:	Three coupons for each substrate for each cleaner were weighed for initial weights. About 0.15-0.2 g of Glass soil that was made previously was put onto the coupons and was left to dry overnight (24-hour dry time). The following day, dirty weights were taken and recorded. Three coupons of the same substrate were placed in the SLW Machine; there were w per Wypall (one Wypall per substrate, per cleaner) amounting to about 2.5 ml of each cleaning chemistry per coupon. The SLW Machine was run for 20 cycles (30 seconds of cleaning). The coupons were taken out and left to dry for another 24 hours. After the 24 hours, they were weighed again for final weights.

Results:

Cleaner	Coupon Type	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Seventh Generation Glass Cleaner	Mirror	0.0340	0.0004	98.82	99.24	97.23
		0.0367	0.0004	98.91		
		0.0163	0.0000	100.00		
	Glass	0.0303	0.0013	95.71	95.43	
		0.0416	0.0006	98.56		
		0.0238	0.0019	92.02		
	Chrome	0.0260	0.0002	99.23	97.03	
		0.0204	0.0008	96.08		
		0.0213	0.0009	95.77		
Invisible Glass	Mirror	0.0372	0.0005	98.66	99.06	96.35
		0.0199	0.0001	99.50		
		0.0305	0.0003	99.02		
	Glass	0.0463	0.0011	97.62	93.71	
		0.0244	0.0016	93.44		
		0.0191	0.0019	90.05		
	Chrome	0.0215	0.0014	93.49	96.28	
		0.0175	0.0004	97.71		
		0.0295	0.0007	97.63		
Windex	Mirror	0.0360	0.0004	98.89	97.87	78.18
		0.0457	0.0013	97.16		
		0.0411	0.0010	97.57		
	Glass	0.0365	0.0026	92.88	91.25	
		0.0250	0.0035	86.00		
		0.0313	0.0016	94.89		
	Chrome	0.0418	0.0077	81.58	45.42	
		0.0179	0.0160	10.61		
		0.0286	0.0160	44.06		
GMA Glass Cleaner	Mirror	0.0415	0.0080	80.72	82.53	85.08
		0.0345	0.0049	85.80		
		0.0333	0.0063	81.08		
	Glass	0.0270	0.0017	93.70	94.98	
		0.0563	0.0015	97.34		

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		0.0311	0.0019	93.89		
	Chrome	0.0385	0.0141	63.38	77.72	
		0.0164	0.0039	76.22		
		0.0295	0.0019	93.56		

Summary:

Substrates:	Glass/Quartz, Chrome				
Contaminants:	SSL Soil 2 Glass Soap Scum				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Green Mountain Amenities	GMA White Vinegar Glass Cleaner	RTU	85.05	☑	
Seventh Generation	Glass Cleaner	RTU	97.23	☑	
SC Johnson & Son Inc	Windex Glass Original w/ Ammonia-D	RTU	78.18	☑	
Stoner Car Care	Invisible Glass	RTU	96.35	☑	

Conclusion:

Both the Seventh Generation Glass Cleaner and the Invisible Glass showed high efficacy across all substrates. The Windex was highly successful in removing the glass soil from mirror and glass, but struggled significantly in removing the glass soil from chrome. While the Green Mountain Amenities Glass cleaner showed to be effective in removing the glass soil from mirror and glass, it did not match the performance of the other three cleaners in removing the soil from mirror. It was able to match the performance of the other three cleaners in removing the soil from glass. The Green Mountain Amenities Glass Cleaner also struggled to remove the glass soil from chrome as the Windex did, however it was able to perform better than the Windex in this scenario.