CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2014

DateRun: 01/29/2014

Experimenters: Loc Nguyen, Francisco Abreau

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Glass/Quartz, Chrome

PartType: Coupon

Contaminants: Films, Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To evaluate supplied products for glass cleaning using manual cleaning

Experimental Procedure: Preweighed glass, mirror, and chrome coupons were coated with SSL #2 and Glass Soil using a hand held swab and were allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added and were subjected to a visual Streak/Film Test to see if it removed all of the soil. The visual Streak/Film Test ranked from 1-7; (1 is the best, 7 is the worst).

Results: The compared products had differing overall average removal efficiency. As the results show, the Windex product cleaned the best at an average cleaning efficiency of 91.35%. The Chrisal product trailed behind a little at a cleaning efficiency of 85.26%. As for the Film and streak test, the Windex product fared higher rating levels than the Chrisal product. The Windex product scored an average of 2.66 for Streak and 2.83 for Filming. The Chrisal product scored an average of 2.83 for Streaking and 3.16 for Filming. The product which most efficiently removed the soil was Windex, it also had more satisfactory levels for Filming and Streaking.

Substrate	Cleaner	Initial wt	Cont. wt	Clean wt	%Removed	Streak	Film
Glass	Chrisal	37.8694	37.9031	37.8739	86.65	3	3
Glass	Chrisal	37.6031	37.6368	37.6080	85.46	2	3
Glass	Chrisal	37.9762	38.0038	37.9805	84.42	2	3
Mirror	Chrisal	38.0481	38.1004	38.0538	89.10	3	3
Mirror	Chrisal	37.4532	37.4746	37.4569	82.71	4	3
Mirror	Chrisal	37.4271	37.4443	37.4301	82.56	3	5
Chrome	Chrisal	21.7001	21.7153	21.7027	82.89	n/a	n/a
Chrome	Chrisal	21.6368	21.6996	21.6427	90.61	n/a	n/a
Chrome	Chrisal	21.6673	21.7030	21.6734	82.91	n/a	n/a
Glass	Windex	37.6475	37.7040	37.6506	94.51	2	2
Glass	Windex	37.5274	37.5578	37.5313	87.17	2	2
Glass	Windex	37.8038	37.8222	37.8055	90.76	2	4
Mirror	Windex	37.5615	37.5805	37.5650	81.58	4	3
Mirror	Windex	37.1573	37.1804	37.1593	91.34	4	3
Mirror	Windex	38.0065	38.0366	38.0087	92.69	2	3
Chrome	Windex	22.0848	22.0871	22.0850	91.30	n/a	n/a
Chrome	Windex	22.0521	22.0700	22.0528	96.09	n/a	n/a
Chrome	Windex	21.6674	21.6946	21.6683	96.69	n/a	n/a

Summary:

Substrates:	Glass/Quartz, Chrome				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Chrisal USA Inc	Super CMF 240	1	85.26	☑	
SC Johnson & Son Inc	Windex Glass & More Cleaner (Spray)	100	91.35	☑	

Conclusion: