CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 05/26/2021

Experimenters: Ross Goding, Edward Judge

ClientType: Lab

ProjectNumber: Project #4

Substrates: Glass/Quartz, Other, Chrome

PartType: Coupon

Contaminants: Glass

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To test the effectiveness of Windex Multi-Surface cleaner in the removal of SSL Soil 2 Glass Soil from various substrates

Experimental Procedure: A Windex Multi-Surface cleaner solution was gathered to begin testing. Then, 3 coupons of each substrate (chrome, glass, mirror) were collected and initial weights were taken. SSL Soil 2 Glass Soil was applied to each coupon and allowed to air dry for 24 hours. After the 24 hour dry time, the weights of the newly contaminated coupons were measured. All coupons were placed into a Gardner-scrub Abrasion Tester machine. Wypall cleaning cloths were attached to each of the 3 cleaning blocks used for the test. Each Wypall cloth and all coupons received 2 sprays of the Windex Multi-Surface cleaner solution and the Gardner-scrub Abrasion Tester was run for 20 repetitions, simulating 20 manual wipes. Once cleaning concluded, the cleaned coupons were allowed to air dry for 24 hours. After 24 hours, the weights of the cleaned coupons were measured.

Results:

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Windex Multi-Surface	Chrome	0.0277	0.0012	95.67	88.18	81.84
		0.0513	0.0020	96.10		
		0.0340	0.0118	65.29		
	Glass	0.0370	0.0016	95.68	78.48	
		0.0335	0.0012	96.42		
		0.0233	0.0132	43.35		
	Mirror	0.0208	0.0004	98.08	78.86	
		0.0226	0.0007	96.90		
		0.0238	0.0139	41.60		

Summary:

Substrates:	Glass/Quartz, Other, Chrome				
Contaminants:	Glass				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
SC Johnson & Son Inc	Windex Glass & More Cleaner (Spray)	100%	81.84	☑	Windex Multi-Surface Cleaner was effective in the removal of Glass Soil from various substrates.

Conclusion: Windex Multi-Surface cleaner was analyzed to determine its effectiveness in the removal of SSL Soil 2 Glass Soil from chrome, glass, and mirror substrates. Test results show that Windex Multi-Surface cleaner was 88.18% effective in removing glass soil from chrome substrates, 78.48% effective in removing glass soil from glass substrates, and 78.86% effective in removing glass soil from mirror substrates. Overall, Windex Multi-Surface cleaner was 81.84% effective in removing glass soil from all substrates used in testing.