

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021  
 DateRun: 07/12/2021  
 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 Ever Spring Cleaner in the removal of Glass Soil from various substrates.

Experimental Procedure: An Ever Spring Cleaner solution was gathered to begin testing. Then, 3 coupons of each substrate (chrome, glass, mirror) were collected and initial weights were taken. 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 Ever Spring 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
	Ever Spring	Chrome	0.1218	0.0326	73.23	73.22	81.49
			0.1218	0.0539	55.75		
			0.0442	0.0115	73.98		
		Glass	0.2878	0.0290	89.92	90.10	
			0.1951	0.0171	91.24		
			0.1290	0.0140	89.15		
		Mirror	0.2527	0.0545	78.43	81.14	
			0.1687	0.0312	81.51		
			0.1700	0.0281	83.47		

Summary:

Conclusion: Ever Spring Cleaner was effective in removing Glass Soil from chrome, glass, and mirror substrates.