

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021  
 DateRun: 06/09/2021  
 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 Pine Sol Multi-Surface Cleaner in the removal of SSL Soil 2 Glass Soil from various substrates

Experimental Procedure: A Pine Sol Multi-Surface Cleaner solution was created by mixing 1 part solution and 64 parts water. 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 Pine Sol 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
Pine Sol Mutli-Surface Cleaner	Chrome	0.0704	0.0052	92.61	82.99	80.10
		0.0771	0.0105	86.38		
		0.1129	0.0454	59.79		
	Glass	0.0485	0.0033	93.20	83.86	
		0.0440	0.0029	93.41		
		0.0574	0.0201	64.98		
	Mirror	0.0458	0.0095	79.26	73.44	
		0.0539	0.0044	91.84		
		0.0382	0.0194	49.21		

Summary:

<b>Substrates:</b>		Glass/Quartz, Other, Chrome			
<b>Contaminants:</b>		Glass			
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Clorox Company	Pine Sol	1/64	80.10	<input checked="" type="checkbox"/>	Pine Sol was effective in the removal of Glass Soil from various substrates.

Conclusion:

Pine Sol Multi-Surface Cleaner was effective in removing SSL Soil 2 Glass Soil from chrome, glass, and mirror substrates.