

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 05/25/2021

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 Palmolive Dish Liquid in the removal of SSL Soil 2 Glass Soil from various substrates

Experimental Procedure: A Palmolive Dish Liquid solution was created by mixing 1 part dish liquid and 20 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 Palmolive Dish Liquid 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
Palmolive Dish Liquid	Chrome	0.0778	0.0020	97.43	85.37	80.05
		0.0912	0.0026	97.15		
		0.0696	0.0301	56.75		
	Glass	0.0568	0.0056	90.14	75.87	
		0.0646	0.0057	91.18		
		0.0767	0.0412	46.28		
	Mirror	0.0418	0.0027	93.54	78.92	
		0.0571	0.0028	95.10		
		0.0399	0.0207	48.12		

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>
Colgate-Palmolive Company	Palmolive Dish Soap	1/20	80.05	<input checked="" type="checkbox"/>	Palmolive Dish Liquid was effective in the removal of Glass Soil from various substrates.

Conclusion: Palmolive Dish Liquid was analyzed to determine its effectiveness in the removal of SSL Soil 2 Glass Soil from chrome, glass, and mirror substrates. The Palmolive solution was found to be 85.37% effective in the removal of glass soil from chrome, 75.87% effective in the removal of glass soil from glass, and 78.92% effective in the removal of glass soil from mirror. Overall, Palmolive Dish Liquid was 80.05% effective in the removal of SSL Soil 2 Glass Soil from all substrates.