CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2019
DateRun:	11/03/2019
Experimenters:	Zoe Lawson, Othon Pagounes, Tuan Le, Tatyanna Moreland Junior
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 the effectiveness of the Mrs. Meyers Lavender Glass cleaner and Cleanyst Free & Clear Glass cleaner
Experimental Procedure:	Twelve pre-weighed coupons, three of each substrate per cleaner, were contaminated with 0.5 grams of glass soil (Water 51.5%, Hair gel 25.6%, Toothpaste 10.4%, Shaving cream 5.3%, Hair spray 3.7%, Spray deodorant 3.5%) distributed onto each coupon. The dirty weights were recorded after the coupons had dried for 24 hours at room temperature (68 F). Two coupons of the same substrate were aligned into a Single Line Washing Unit (SLW) with The Wypall X60 attached to the cleaning sled. The Wypall X60 reinforced wipe along with the coupons were all sprayed three times with the cleaner and then allowed to soak for 30 seconds. Afterwards the Single Line Washing Unit (SLW) was activated and cleaned for 20 cycles. The clean coupons were all then allowed to dry for one hour at room temperature before the final weights were recorded. Visual observations were made on the coupons for spotting and filming following the general guidelines set forth in the CSPA DCC 09A. Filming is best recognized as "haziness" or overall "milkiness", while streaking is best identified as dried droplets or "spotting", usually found strung together into thin white lines. Each coupon was evaluated separately for filming and streaking, (i.e., product residues without added soil), according to a scale of "1" to "7" where; Filming Streaking 7 = high filming 7 = high streaking poor (performance) 1 = no visible filming 1 = no visible streaking (excellent performance) Chemistries Evaluated: (1) Mrs. Meyers Lavender Glass Cleaner; (2) Cleanyst Free & Clear Glass Cleaner

Results: Gravimetric Results:

Cleaner	Substrate	Initial wt. of cont.	Final wt. cont.	% Cont. Removed	Average % of Content Removed	Overall Average % Content Removed
Mrs. Meyers Lavender Glass Cleaner	Glass	0.4168	0.0016	99.62	99.71	99.52
		0.5159	0.0011	99.79		
		0.5489	0.0015	99.73		
	Chrome	0.5406	0.0034	99.37	99.33	
		0.5927	0.0036	99.39		
		0.5649	0.0043	99.24		
Cleanyst Free & Clear Glass Cleaner	Glass	0.4948	0.0024	99.51	99.49	99.56
		0.5409	0.0024	99.56		
		0.5056	0.0031	99.39		
	Chrome	0.5310	0.0020	99.62	99.64	
		0.4998	0.0017	99.66		
		0.5482	0.002	99.64		

Spotting and Filming Visual Final Averaged Results:

Cleaner	Substrate	Average Spot	Average Film
Mrs. Meyers Lavender Glass Cleaner	Glass	2.8	4

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Cleanyst Free & Clear Glass Cleaner		2.7	3
Mrs. Meyers Lavender Glass Cleaner	Chrome	3	5
Cleanyst Free & Clear Glass Cleaner		2.3	3.3

Summary:

Substrates:	Glass/Quartz, Chrome
Contaminants:	Films, Soaps

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Mrs Myers Clean Day	Mrs Meyers Glass Cleaner	100	99.52	☑	
Cleanyst	Cleanyst Free and Clear Glass Cleaner	100	99.56	☑	

Conclusion: