

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2017
 DateRun: 12/20/2017
 Experimenters: Alicia McCarthy, Hayley Byra
 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 compare the effectiveness of removing Bathroom soil from a variety of surfaces using the supplied cleaning products.

Experimental Procedure: Eighteen preweighed coupons, three for each substrate, were soiled with 1g of Glass soil (51.5% water, 25.6% hair gel, 10.4% toothpaste, 5.3% shaving cream, 3.7% hair spray, 3.5% spray deodorant) using a swab. Coupons air dried at room temperature (68F) for 24 hours before recording dirty weights. A sponge provided by EcoEgg was used to manually clean with both the supplied and comparative product. The sponge was saturated once with deionized water before rubbing it into the EcoEgg hard surface cleaner in a circular motion for five seconds. Coupons were cleaned one at a time for 30 seconds in a circular motion with a reapplication of the cleaner between each coupon. A dime sized drop of the comparative product was applied directly to the coupons one at a time and cleaned with a wet sponge for 30 sections in a circular motion. The coupons were dried by wiping once with a microfiber towel before taking clean weights and final observations.

Results:

Cleaner	Substrate	Initial wt. of cont.	Final wt. of cont.	%Cont. Removed	Average %	% Overall
Hard Surface Cleaner Citrus Burst	Glass	0.1424	0.0004	99.72	96.81	92.76
		0.1199	0.0004	99.67		
		0.1396	0.0125	91.05		
	Chrome	0.1509	0.0200	86.75	86.87	
		0.1535	0.0164	89.32		
		0.1522	0.0235	84.56		
	Mirror	0.1474	0.0086	94.17	94.60	
		0.1529	0.0027	98.23		
		0.1547	0.0133	91.40		
Soft Scrub	Glass	0.1409	0.0076	94.61	95.41	96.41
		0.1423	0.0040	97.19		
		0.1490	0.0083	94.43		
	Chrome	0.1554	0.0058	96.27	95.02	
		0.1509	0.0062	95.89		
		0.1563	0.0111	92.90		
	Mirror	0.1444	0.0007	99.52	98.81	
		0.1453	0.0011	99.24		
		0.1465	0.0034	97.68		

Observations:

Both cleaners easily removed the soil. EcoEgg's product left behind some residue after drying, but it looks like it could be easily removed by wiping a wet sponge on the surface.

Summary:

Substrates:	Glass/Quartz, Chrome				
Contaminants:	Films, Soaps				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Eco Egg	Hard Surface Cleaner Citrus	100	92.76	<input checked="" type="checkbox"/>	
Dial Professional	Soft Scrub Lemon	100	96.41	<input checked="" type="checkbox"/>	

Conclusion:

EcoEgg's Hard Surface Cleaner Citrus Burst is as effective as the comparison cleaning product at removing glass soil from glass, chrome, and mirror.