

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008  
 DateRun: 07/11/2008  
 Experimenters: Jason Marshall, Shweta Bansal  
 ClientType: Cleaner Manufacturer  
 ProjectNumber: Project #1  
 Substrates: Glass/Quartz, Plastic, Chrome  
 PartType: Coupon  
 Contaminants: Films, Soaps  
 Cleaning Methods: Manual Wipe  
 Analytical Methods: Gravimetric  
 Purpose: To evaluate three supplied products for glass cleaning following GS 37 requirements  
 Experimental Procedure: Two of the three supplied cleaning product were diluted to vendor recommended concentration using DI water (32:1 and 128:1). In addition, the third product was prepared following the specified procedure - oxygenating cold tap water for about 10 minutes.  
 Preweighed chrome, glass and composite tile coupons were coated with SSL Soil 2 (Glass soap scum: Colgate Regular shaving cream 5.3%, Arid Extra Extra Spray Deodorant 3.5%, Suave Naturals Flexible Hold hair spray 3.7%, Aleeda Texturizing hair gel 25.6% Colgate Total toothpaste 10.4%, Water 51.5%) by pump spraying the mix. The soil was allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added.  
 Three coupons were placed into a Gardner Straight Line Washability unit. A Kimberly-Clark Wypal reinforced paper towel was attached to the cleaning sled and soaked with 5-7 sprays of cleaning solutions. Each coupon was sprayed 7-10 times with the same cleaning solution. The cleaning unit was run for 5 cycles (~9 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded, efficiencies were calculated and recorded.  
 Results: All three products were effective at removing the glass soap scum from the three surfaces using manual wiping. The Lotus Sanitizing System resulted in the highest efficiency, removing more than 90% of the soap film. The table lists the amount of soil added, the amount remaining after cleaning and the calculated efficiency for each coupon cleaned.

Substrate	Cleaner	Initial wt	Final wt	% Removed
glass	Lotus	0.0390	0.0031	92.05
		0.0491	0.0048	90.22
		0.0415	0.0046	88.92
glass	Pleasant	0.0521	0.0031	94.05
		0.0499	-0.0003	100.60
		0.0375	0.0057	84.80
glass	Compass	0.0522	0.0044	91.57
		0.0639	0.0038	94.05
		0.0552	0.0035	93.66
chrome	Lotus	0.0682	0.0090	86.80
		0.0605	0.0059	90.25
		0.0624	0.0088	85.90
chrome	Pleasant	0.0969	0.0205	78.84
		0.0533	0.0137	74.30
		0.1056	0.0260	75.38
chrome	Compass	0.0821	0.0136	83.43
		0.0731	0.0172	76.47
		0.1132	0.0227	79.95
composit tile	Lotus	0.0777	0.0028	96.40
		0.0627	0.0085	86.44
		0.0710	0.0020	97.18
composit tile	Pleasant	0.0418	0.0044	89.47
		0.0641	0.0039	93.92

## CLEANING LABORATORY EVALUATION SUMMARY

		0.0416	0.0029	93.03
composit tile	Compass	0.0549	0.0065	88.16
		0.0442	0.0021	95.25
		0.0658	0.0021	96.81

Summary:

<b>Substrates:</b>	Glass/Quartz, Plastic, Chrome				
<b>Contaminants:</b>	Films, Soaps				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Tersano	Lotus Sanitizing System	100	90.46	<input checked="" type="checkbox"/>	
Triple S	Pleasant Neutra Shine	3.1	87.15	<input checked="" type="checkbox"/>	
Triple S	Compass	0.78	88.82	<input checked="" type="checkbox"/>	

Conclusion:

The Lotus Sanitizing System was found to be effective for removing the bathroom soil from various surfaces using manual wiping. It compared well to the two other cleaning products supplied for testing.