

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 06/01/2021

Experimenters: Ross Goding, Edward Judge

ClientType: Lab

ProjectNumber: Project #4

Substrates: Ceramics, Plastic, Chrome

PartType: Coupon

Contaminants: Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Visual

Purpose: To test the effectiveness of Windex Glass Cleaner in the removal of Bathroom Soil from various substrates

Experimental Procedure: A Windex Glass Cleaner solution was gathered to begin testing. Then, 3 coupons of each substrate (ceramic, chrome, plastic) were collected and initial weights were taken. Bathroom 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 Windex Glass 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
	Windex Glass Cleaner	Ceramic	0.0646	0.0008	98.76	88.58	87.75
			0.1215	0.0011	99.09		
			0.1048	0.0411	60.78		
		Chrome	0.1231	0.0053	95.69	90.01	
			0.1332	0.0050	96.25		
			0.1396	0.0306	78.08		
		Plastic	0.1412	0.0121	91.43	84.67	
			0.1399	0.0131	90.64		
			0.1240	0.0348	71.94		

Summary:		<b>Substrates:</b> Ceramics, Plastic, Chrome			
		<b>Contaminants:</b> Soaps			
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
SC Johnson & Son Inc	Windex Glass & More Cleaner (Spray)	100%	87.75	<input checked="" type="checkbox"/>	Windex Glass Cleaner was effective in the removal of Bathroom Soil from various substrates.

Conclusion: Windex Glass Cleaner was analyzed to determine its effectiveness in removing Bathroom Soil from ceramic, chrome, and plastic substrates. Windex Glass Cleaner was found to be 88.58% effective in the removal of Bathroom Soil from ceramic, 90.01% effective in removing Bathroom Soil from chrome, and 84.67% effective in removing Bathroom Soil from plastic. Overall, Windex Glass Cleaner was 87.75% effective in removing Bathroom Soil from all substrates used in testing.