

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2023  
 DateRun: 03/06/2023  
 Experimenters: Namrata Chauhan, Mei Jin  
 ClientType: Chemical Company  
 ProjectNumber: Project #1  
 Substrates: Ceramics, Plastic, Chrome  
 PartType: Coupon  
 Contaminants: SSL Soil 1 Bathroom Soap Scum  
 Cleaning Methods: Manual Wipe  
 Analytical Methods: Gravimetric

Purpose: To evaluate the efficacy of Bioneat with bathroom soap scum SSL soil

Experimental Procedure: Nine pre-weighed coupons, three of each substrate per cleaner, were contaminated with one gram of Bathroom Soap Scum using a handheld swab and air dried at room temperature (68 F) for 24 hours. The contaminated coupons were weighed to record dirty weights before placing three coupons per cleaner of the same substrate into a Gardner Straight Line Washability (SLW) unit. A Kimberly-Clark Wypal reinforced paper towel was attached to the cleaning sled. The Wypal and each coupon were treated with three sprays of the product and cleaned for 20 cycles (~30 seconds of cleaning). Cleaned coupons were wiped once with a dry paper towel before the final weights were taken.

Cleaner	Substrate	Final wt of cont.	%Cont Removed	% AVG
Bioneat	Ceramic	0.0070	90.38	90.34
		0.0092	87.01	
		0.0044	93.62	
	Plastic	0.0079	89.28	87.95
		0.0110	85.99	
		0.0083	88.58	
	Chrome	0.0225	69.96	75.64
		0.0094	87.40	
		0.0229	69.55	

\* All coupons have small spots left.

Summary:

<b>Substrates:</b>		Ceramics, Plastic, Chrome			
<b>Contaminants:</b>		SSL Soil 1 Bathroom Soap Scum			
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Durkin Company	Bioneat	6:1 dilution	84.64	<input checked="" type="checkbox"/>	Overall average percent efficacy. Bioneat was more effective on ceramic than the other substrates.

Conclusion:

Bioneat is a reasonably effective cleaner to remove soil from the coupons.