CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2025

DateRun: 01/28/2025

Experimenters: Cindy McClaughlin, Rachael Rososky

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Plastic, Wood, Painted metal

PartType: Coupon

Contaminants: Hucker's Soil

Cleaning Methods: Mechanical Agitation

Analytical Methods: Gravimetric

Purpose: To test the efficiency of ServeCo All Purpose Cleaner against Seventh Generation All Purpose Cleaner at removing Hucker's Soil from various substrates.

Experimental Procedure: Eighteen pre-weighed coupons, three per substrate per cleaner, were contaminated with 0.5 g of Hucker's soil composed of 44.2% distilled water, 13.5% evaporated milk, 8.8% salted butter, 8.8% stone ground wheat flour, 8.8% egg yolk, 0.9% printer's ink with boiled linseed oil, 2.7% saline solution, and 3.5% India ink. Coupons dried at room temperature (68°F) for 24 hours before their dirty weights were recorded.

Three coupons of the same substrate were placed in a Single Line Washing Unit (SLW) with a Wypall X60 wipe attached to the cleaning sled. The wipe and coupons were sprayed three times with the cleaner and soaked for 30 seconds. The SLW was then run for 20 cleaning cycles (30 seconds of manual cleaning). Coupons dried overnight at room temperature before final weights were recorded.

Results:

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	Average % Removal	Average Cleaner %
ServeCo All Purpose	Finished Oak Wood	0.2055	0.0775	62.29	63.60	67.47
		0.1927	0.0611	68.29		
		0.1996	0.0794	60.22		
	Plastic	0.2407	0.0226	90.61	67.46	
		0.2297	0.0434	81.11		
		0.2367	0.1641	30.67		
	Painted Metal	0.2192	0.1041	52.51	71.34	
		0.2322	0.0361	84.45		
		0.2361	0.0542	77.04		
Seventh Generation All Purpose	Finished Oak Wood	0.1933	0.1376	28.82	29.57	55.97
		0.1863	0.1242	33.33		
		0.1811	0.133	26.56		
	Plastic	0.2144	0.2095	2.29	56.32	
		0.2454	0.0178	92.75		
		0.2433	0.0634	73.94		
	Painted Metal	0.2318	0.0471	79.68	82.00	
		0.2347	0.0244	89.60		
		0.2346	0.0546	76.73		

Summary:

Substrates:	Plastic, Wood, Painted metal				
Contaminants:	Hucker's Soil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
ServeCo North America	ServeCo All Purpose Cleaner	100%		☑	
Seventh Generation	All-Purpose Natural Cleaner	100%		☐	

Conclusion: ServeCo All Purpose Cleaner was more effective than Seventh Generation All Purpose on finished oak wood, plastic, and painted metal.