CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2025

DateRun: 11/10/2025

Experimenters: Amelia Wagner, Rachael Rososky

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Stainless Steel, Chrome, Vinyl Composite Tiles

PartType: Coupon

Contaminants: Greases, DCC-17

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To test the efficacy of Titan's kitchen cleaner, K1619-012, compared to a baseline product (Clorox Clean Freak) in removing organic grease soil (DCC-17) from various substrates.

Experimental Procedure: Testing followed the Household & Commercial Products Association DCC-17 Test Method Standard.

Three coupons of each substrate were assigned to one of the two cleaners being tested. The coupons had their initial weights recorded. About 0.5 grams of DCC-17 soil (vegetable shortening, lard, vegetable oil, carbon black) was spread on the bottom third of each coupon using a swab. The soiled coupons were then left to air dry overnight. The next day, the dirty weights of each coupon was recorded. Three coupons at a time were placed in the Straight-Line Washability unit, and a KC Wypal reinforced paper towel was attached to the cleaning sled and treated with two sprays of cleaning solution (equivalent to 2.5ml). Each coupon was sprayed twice with the same cleaning solution (equivalent to an additional 2.5 ml). The cleaning unit was run for 20 cycles (equivalent of 30 seconds of cleaning). Coupons were dried and final weights were recorded.

Results:

Cleaner	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Clean Freak	ceramic	0.4528	0.0404	91.08	93.78	92.91
		0.4691	0.0225	95.20		
		0.5352	0.0265	95.05		
	stainless Steel	0.5245	0.0235	95.52	93.26	
		0.4745	0.0443	90.66		
		0.4912	0.0315	93.59		
	VCT	0.5178	0.0372	92.82	91.70	
		0.4943	0.0427	91.36		
		0.4965	0.0450	90.94		
Titan K1619-012	ceramic	0.5148	0.0674	86.91	83.45	88.97
		0.4666	0.0961	79.40		
		0.4802	0.0767	84.03		
	stainless Steel	0.5073	0.0341	93.28	91.20	
		0.4875	0.0510	89.54		
		0.4992	0.0460	90.79		
	VCT	0.5506	0.0464	91.57	92.27	
		0.5547	0.0416	92.50		
		0.4758	0.0345	92.75		

Summary:

Substrates:	Stainless Steel, Chrome, Vinyl Composite Tiles				
Contaminants:	Greases, DCC-17				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Clorox Company	Clorox Clean Freak	RTU	92.91	☑	
Titan Homes - DLS Formulations	Titan K1619-02 (kitchen)	RTU	88.97	☑	

Conclusion: Both the Titan K1619-012 and the Clorox Clean Freak are effective cleaners in removing DCC-17 soil from the tested substrates. The Titan K1619-012 showed about equal efficacy in removing the soil from stainless steel and vinyl composite tile as the Clorox Clean Freak. The Titan K1619-012, while effective in removing the soil from ceramic, did not match the performance of the Clorox Clean Freak for this specific substrate. Overall, the Clorox Clean Freak shows slightly more cleaning power than the Titan K1619-012.