CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2023

DateRun: 11/07/2023

Experimenters: Amelia Wagner

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics

PartType: Coupon

Contaminants: Food

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To evaluate the efficacy of the Green Mountain Amenities Dish Soap in removing soil from ceramic in comparison to a dish soap already on the market.

Experimental Procedure: Six pre weighed ceramic coupons were assigned to each cleaner, three to be soiled with the DCC18 (a mixture of soybean oil, lard, whole egg powder, potato flour, and deionized water) and three to be soiled with spaghetti sauce. Once soiled, the coupons were left to dry overnight before dirty weights were taken. The next day, the coupons were hand washed with a sponge for 10 seconds. Two pumps of each cleaner were applied to the sponge for washing (3g). After the 10 seconds of washing, the coupons were rinsed with room temperature tap water for 1 second. The coupns were then left to air dry before final weights were taken.

Results:

Cleaner	Soil	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Dawn Dish Soap	DCC18	0.8307	0.0574	93.09	95.73	69.02
		0.3404	0.0107	96.86		
		0.4545	0.0125	97.25		
	Spaghetti Sauce	0.1615	0.0909	43.72	42.31	
		0.2657	0.1483	44.19		
		0.1898	0.1157	39.04		
GMA Dish Soap	DCC18	0.8332	0.0612	92.65	93.65	78.48
		0.7737	0.0497	93.58		
		0.7114	0.0375	94.73		
	Spaghetti Sauce	0.2492	0.1021	59.03	63.30	
		0.1682	0.0618	63.26		
		0.2813	0.0911	67.61		

Summary:

Conclusion: Both cleaners were effective in removing the DCC18 soil and performed equally well. Neither cleaner was effective in removing spaghetti sauce from the coupons, however the GMA dish soap performed better than the Dawn dish soap in this aspect.