CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2020

DateRun: 07/24/2020

Experimenters: Hayley Byra, Nicole Kebler

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics

PartType: Part

Contaminants: Food

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: To evaluate the longevity of the foam from a single dose of dishwashing product on a clean sponge when used according to a "neat" dishwashing procedure.

Experimental Procedure: Three trials were conducted for each of the three dish soap products tested; Dawn, Joy, and L'AVANT Collective. Trials were set up according to a "neat" dishwashing procedure which observes the stability of the surfactant foam by counting the number of plates washed until no foam is visible on the sponge or plate. For this test, the sponge method was used to determine the foam level by holding the product treated sponge in the palm of the hand with the detergent side up. Using a thumb, pressure is placed on the center of the sponge to observe foam. The test is considered complete when no foam is observed on the sponge.

Clean ceramic plates were soiled with two grams of DCC-18 using a spatula and air dried to cure for two hours at room temperature (68˚F). Each dish soap had a new sponge that was rinsed and wrung prior to testing with hot water remove any potential wetting agents found in the sponge and then air dried up to 10 minutes before testing. Two grams of a dish soap was added to one side of a new sponge in a figure eight motion right before a trial. Four liters of heated tap water (112°F) was placed into a clean dishpan for each product trial and the starting temperature recorded. Plates were cleaned using the detergent treated side of the sponge for 10 seconds in a circular motion with consistent pressure. After no foam was visible on the sponge, the final temperature was recorded and number of plates counted.

Results:

Product	Trials	Start Temp °F	End Temp °F	# of Plates	Ave. Start Temp °F	Ave. End Temp °F	Ave. # of Plates
Dawn	1	110	108	6	113	107	7
	2	110	104	6			
	3	118	108	9			
Joy	1	110	110	8	115	107	10
	2	118	103	11			
	3	116	108	10			
L'AVANT Collective	1	110	102	10	112	102	11
	2	113	104	10			
	3	114	101	14			

L'AVANT Collective dish soap had more bubbles initially than the other two dish soaps and lasted the longest on average.

Summary:

Substrates:	Ceramics				
Contaminants:	Food				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Procter & Gamble	Dawn	100%		☑	7 Plates (Average)
Procter & Gamble	Joy Dishwashing Soap	100%		☑	10 Plates (Average)
L'AVANT Collective	L'AVANT Collective Dish Soap	100%		☑	11 Plates (Average)

Conclusion: L'AVANT Collective dish soap was the most effective dish soap out of the three products tested.