

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2014

DateRun: 04/25/2014

Experimenters: Jason Marshall, Junhee Cho, George Liang

ClientType: Cleaner Manufacturer

ProjectNumber: Project #4

Substrates: Ceramics

PartType: Coupon

Contaminants: Food

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: This method is intended to evaluate the longevity of the foam from a single dose of dishwashing product when used according to a neat dishwashing procedure

Experimental Procedure: Three dishwashing products were selected (VI JON Dishwashing, Dawn dishwashing cleaner, Method power foaming soap). Testing followed CSPA DCC 18, "neat" hand dish washing test method. The method was selected as the supplied dishwashing products were designed to be dosed directly onto the sponge to wash.

Based on the standard, food soil was prepared at room temperature and was used immediately after making. Food soil was a mixture of soybean oil, lard, whole egg powder, potato flour, and deionized water. Cleaning performance was conducted using a modified version of the DCC 18 procedure. Three grams (in place of 2 grams) of cleaner (two pumps from supplied bottle) was dosed onto sponge. Each dish was cleaned for 10 second. Foaming level was evaluated by observational analysis based on using sponge method. Tester counted the number of plates until sponge was not able to show any bubbles or forming when tester pressed gently in the center of the sponge with the thumb after washing.

As a result, average number of plates was used to show the cleaning efficacy (longer foaming stability) from each cleaner. Each cleaner was tested three times to measure the efficacy (foaming level).

Results: VI-JON Foaming Dish Soap #9E3AA; DAWN Dish Soap; Method power foam Dish soap Three products were tested. The average number of plates by Vi-Jon was 2.67. It was lower than other comparison products. The average of number of plates by Dawn was 4 and the average plate number of Method Power Foam dish soap was 3.6.

Visually, the method power foaming dish soap made more foam than others when tester pumped the spray. But most foam was removed during first washing plate. This test is designed for general food soil, so the result can be different for other types of grease or oil. The table lists the observations for each cleaner including water temperature.

Product	Tester	Number of Plate	Starting Bath Temperature °C	Ending Bath Temperature °C	Average Number of plates
VI-JON Foaming Dish Soap #9E3AA	A	3	44	42	2.67
VI-JON Foaming Dish Soap #9E3AA	A	2	44	41	
VI-JON Foaming Dish Soap #9E3AA	A	4	43	40	
VI-JON Foaming Dish Soap #9E3AA	B	2	44	43	

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VI-JON Foaming Dish Soap #9E3AA	B	2	44	42	
VI-JON Foaming Dish Soap #9E3AA	B	3	44	40	
DAWN Dish Soap	A	3	44	41	4
DAWN Dish Soap	A	3	44	42	
DAWN Dish Soap	A	4	44	42	
DAWN Dish Soap	B	4	45	41	
DAWN Dish Soap	B	5	43	39	
DAWN Dish Soap	B	5	44	40	
Method power foam Dish soap	A	3	44	41	3.17
Method power foam Dish soap	A	3	44	41	
Method power foam Dish soap	A	5	44	40	
Method power foam Dish soap	B	3	44	39	
Method power foam Dish soap	B	2	45	40	
Method power foam Dish soap	B	3	44	39	

Summary:

Substrates:	Ceramics				
Contaminants:	Food				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Vi-Jon	VI-JON Foaming Dish Soap #9E3AA	100		<input type="checkbox"/>	
Procter & Gamble	Dawn Dish Detergent	111		<input checked="" type="checkbox"/>	
Method	Method Power Foam Dish Soap	100		<input checked="" type="checkbox"/>	

Conclusion:

This test indicated that Dawn and Method Power Foam dish soap have better cleaning efficacy than Vi-JON based on same RTU dishwashing condition.