# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2018

DateRun: 12/31/1969

Experimenters: Vinh Tran, Othon Pagounes, Ted Kearney

ClientType: Cleaner Manufacturer

ProjectNumber: Project #3

Substrates: Ceramics

PartType: Coupon

Contaminants: Food

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: To evaluate foam stability and effectiveness of the AGAE Liquid Dish Soap against Mrs. Meyers Clean Day Dish and Dawn Ultra DW Liquid Soap on the removal of Soil B from ceramic plates by manual hand and cloth cleaning methods.

Experimental Procedure: All ceramic plates were previously cleaned and dried when two grams of DCC 18 (44% Water, 21.3% Soybean Oil, 13% Whole Egg Powder, 11% Potato Flour, 10.7% Lard) distributed onto each plate. The respective dish soap was measured out to two grams. The dish soap then was distributed onto a clean sponge through a pipette in a figure eight pattern. Four liters of water were heated to 112° F and poured into a basin, and then was allowed to fall to a temperature of 110° F, and the manual cleaning method began. This consisted of washing each plate at angle, with one-eighth of the plate submerged in the water, cleaning both the front and back sides of each plate in a circular motion for 10 to 20 seconds. After every plate, the tester would press a thumb in the middle of the sponge of the dish soap covered side to see if any bubbles remained. This process continued until when pressure was applied there were no bubbles appeared. The number of plates cleaned as well as the final temperature of the water in the basin were recorded. The process was repeated once for each dish soap.

Results:

| Cleaner | Initial Temperature | Final Temperature | Number of Plates Washed | Average Number of Plates Washed |
|---|---|---|---|---|
| AGAE Liquid Dish Soap Formulation | 112° F | 109° F | 5 | 5.33 |
| | 110° F | 100° F | 6 | |
| | 111° F | 107° F | 5 | |
| Mrs. Meyers Clean Day Dish Formulation | 113° F | 104° F | 7 | 5.00 |
| | 110° F | 104° F | 4 | |
| | 111° F | 106° F | 4 | |
| Dawn Ultra DW Liquid Soap Formulation | 112° F | 101° F | 5 | 4.33 |
| | 112° F | 103° F | 4 | |
| | 109° F | 106° F | 4 | |

Summary:

| **Substrates:** | Ceramics | | | | |
|---|---|---|---|---|---|
| **Contaminants:** | Food | | | | |
| **Company Name:** | **Product Name:** | **Conc.:** | **Efficiency:** | **Effective:** | **Observations:** |
| AGAE Technologies | Liquid Dish Soap | 2g | 0.00 | ☑ | Average Number of Plates Washed 5.33 |
| Mrs Myers Clean Day | Mrs Meyers Liquid Dish Soap | 2g | 0.00 | ☑ | Average Number of Plates Washed 5.00 |
| Procter & Gamble | Dawn Ultra Dishwasher Liquid Soap | 2g | 0.00 | ☑ | Average Number of Plates Washed 4.33 |

Conclusion: AGAE Liquid Dish Soap was most effective compared to Mrs. Meyers Clean Day Dish, which in turn was more effective than the Dawn Ultra DW Liquid Soap.