CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2017

DateRun: 12/19/2017

Experimenters: Alicia McCarthy, Hayley Byra

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Porcelain

PartType: Coupon

Contaminants: Greases, Food

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To compare the effectiveness of removing soil from an oven surface using the supplied cleaning products.

Experimental Procedure: Six preweighed coupons, three for each cleaner, were soiled with 0.37g of CSPA DCC-12 soil (85.4% Butter, 6.5% sugar, 4.3% deionized water, 3.4% flour) using a swab and baked in an oven preheated at 475°F for 120 minutes. Coupons were removed after baking and allowed to cool before taking dirty weights. A sponge, provided by EcoEgg, was used to manually clean with both the supplied and comparative product. The sponge was saturated once with deionized water before rubbing it into the EcoEgg Hard Surface Cleaner in a circular motion for five seconds. Coupons were cleaned one at a time for 30 seconds in a circular motion with a reapplication of the cleaner between each coupon. A dime sized drop of the comparative product was applied directly to the coupons one at a time and cleaned with a wet sponge for 30 sections in a circular motion. The coupons were dried by wiping once with a microfiber towel before taking final weights and visual observations.

Results:

Cleaner	Initial wt.	Final wt.	% Removed	% Average
Hard Surface Cleaner Citrus Burst	0.0788	0.0042	94.67	96.35
	0.0984	0.0010	98.98	
	0.0696	0.0032	95.40	
Soft Scrub	0.1663	0.0161	90.32	93.93
	0.1538	0.0097	93.69	
	0.1528	0.0034	97.77	

Observations:

EcoEgg product caused some chalky residue after drying. There was some soil left behind on all of the coupons. More time and agitation for both cleaning products would have completely removed all of the soil. EcoEgg product had an easier time lifting off the soil from the coupon after a few seconds of scrubbing with the sponge.

Summary:

Substrates:	Porcelain				
Contaminants:	Greases, Food				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Eco Egg	Hard Surface Cleaner Citrus	100	96.35	☑	
Dial Professional	Soft Scrub Lemon	100	93.93	☑	

Conclusion: Eco Egg Hard Surface Cleaner Citrus Burst is as effective as the comparative product at removing oven soil from porcelain.