CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2008
DateRun:	12/22/2008
Experimenters:	Jason Marshall
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Glass/Quartz
PartType:	Coupon
Contaminants:	Films, Soaps
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric, Photography, Visual
Purpose:	To evaluate supplied glass cleaner for streaking and smearing as compared to conventional glass cleaner.

Experimental Procedure:

The supplied cleaning product was used at the supplied concentration (256:1). A second product, selected by the lab, was used at full strength based on vendor recommended usage for glass cleaning. Preweighed mirrored glass coupons were coated with SSL Soil 2 (Glass soap scum: Water 51.5%, Hair gel 25.6%, toothpaste 10.4%, Shaving cream 5.3%, Hair spray 3.7% and Spray deodorant 3.5%) using a handheld swab and allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added.

Three coupons were placed into a Gardner Straight Line Washability unit. A Kimberly Clark Reinforced paper towel was attached to the cleaning sled and soaked with 5-7 sprays of cleaning solutions. Each coupon was sprayed 7-10 times with the same cleaning solution. The solution was allowed to penetrate for 30 seconds followed by cleaning in the SLW unit for 5 cycles (~10 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded, and efficiencies were calculated and recorded. In addition, a panel of four staff members reviewed the cleaned coupons to determine the level of streaking and smearing. They ranked the two sets of cleaners based on which product had less streaking and smearing. Photographs of the before and after cleaning were taken to assist in the comparison of the two products.

Results:

The Super H2O2 had a marginally higher efficiency than the Windex product. The panel of four all ranked the supplied product as having less streaking and smearing than the conventional glass cleaner. The table lists the amount of soil initially added and the amount remaining after cleaning, the product efficiency for each coupon cleaned and the comments from the panel.

Cleaner	Initial wt	Final wt	% Removed	Observations
Super H2O2 - glass	0.0188	0.0004	97.87	less streaky than conventional
	0.0236	0.0013	94.49	cleaner then conventional
	0.0213	0.0004	98.12	less streaks
				better looking - less streaks and smears
Windex - glass	0.0362	0.0038	89.50	
	0.0243	0.0011	95.47	
	0.0246	0.0014	94.31	

Summary:

Substrates:	Glass/Quartz				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Cleanline Products	H2O2 Super Citrus Concentrate	0.39	96.83	☑	
SC Johnson & Son Inc	Windex Glass & More Cleaner (Spray)	100	93.09	☑	

Conclusion:

The supplied product had an overall average efficiency greater than 85% and would be considered effective based on the SSL testing methodology. The Super H2O2 had less streaking and smearing as judged by a panel of four staff members.