CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2009
DateRun:	09/28/2009
Experimenters:	Jason Marshall, Junhee Cho, Johnny Le
ClientType:	Cleaning Equipment Mfr
ProjectNumber:	Project #1
Substrates:	Stainless Steel
PartType:	Coupon
Contaminants:	Fingerprints
Cleaning Methods:	Manual Wipe
Analytical Methods:	Visual, Gloss-Color Meter
Purpose:	To evaluate supplied cleaning equipment for stainless steel polish as compared to conventional products
Experimental Procedure:	Nine precleaned coupons were measured using a Spectro Guide Gloss-Color meter from BYK Gardner to evaluate gloss. Baseline gloss readings of the surface were taken in five locations on stainless steel coupons. Coupons were then contaminated with finger oils from three lab staff members. Gloss readings were taken a second time. Cleaning products were then sprayed onto the surface, wiped off with a microfiber cloth attached to a Garnder Straight-line washability unit and cleaned for 5 cycles. Coupons were then dried with a single pass using a fresh microfiber cloth. Gloss readings were taken again in the same five locations. The difference in gloss-color was then compared to determine effectiveness. In addition, visual observations were made by at least three lab staff members to determine effectiveness.
Results:	The conventional product resulted in the greatest increase in gloss increase following removal of the stainless-steel coupons. Based on gloss meter readings, Activeion had the lowest increase in gloss (lower than water). However, there was still an increase in gloss (20% increase) from the initial level readings. The table lists the measurements made for initial, dirty and final readings.

Gloss								
Product	Initial	Average	Dirty	Average	Final	Average	Delta Gloss	% increase
Activeion	40.7	37.67	49.6	36.00	29.4	45.20	7.53	1.2000
	37.6		34.2		42.5			
	34.7		24.2		63.7			
Shiela Shine	25.7	33.17	40.2	35.60	74.5	84.93	51.77	2.5608
	31.4		39.3		79.5			
	42.4		27.3		100.8			
Water	36.6	50.37	34.5	49.57	64.1	64.93	14.57	1.2892
	38		23		56.4			
	76.5		91.2		74.3			

Visual observations showed that the Activeion cleaned coupons looked the cleanest, free of smudges or other dust particles. Observations and ranking by three lab staff are listed in the next table.

Product	Visual Observations	Ranking 1	2	3
Activeion	Surface looked free of any residual fingerprints/oil following wipe cleaning.	1	1	1
	Coupons had a brighter look to them			
Shiela Shine	Surface was free of any residual fingerprints/oil following wipe cleaning.	3	2	3
	However, surface had significant film left behind from the polish.			
	Overnight the surface was still wet and had started collecting dust particles.			

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	Strong odor when product was applied during cleaning.			
Water	Some signs of fingerprints/oil smudges after cleaning	2	3	2
	Surface was not as bright as the Activeion cleaned coupons			

Summary:

Substrates:	Stainless Steel
Contaminants:	Fingerprints

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Activeion Cleaning Solutions LLC	Activeion Pro	100	0.00	☑	
Sheila Shine Inc	Sheila Shine	100	0.00	☐	
Water	Water	100	0.00	☐	

Conclusion: The Activeion product was effective at removing finger oils from a stainless-steel surface using manual wiping. The process improved the shine/gloss by 20 percent.