

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2010
 DateRun: 01/11/2010
 Experimenters: Jason Marshall, Junhee Cho
 ClientType: Cleaner Manufacturer
 ProjectNumber: Project #1
 Substrates: Vinyl Composite Tiles
 PartType: Coupon
 Contaminants: Coatings, Waxes
 Cleaning Methods: Mechanical Agitation
 Analytical Methods: Gloss-Color Meter
 Purpose: The determination of soil resistance of floor polishes on test tile

Experimental Procedure: Vinyl composite tiles were coated using the supplied product and a conventional floor coating. A known amount of coating was first applied to the surface and then smoothed using a 10-mil blade to ensure consistent thickness of the coating across the VCT.

Two grams of AATCC soil was sprinkled across the portion of the tile over which the roller will track. The roller was run for 300 cycles (600 passes) across the surface. During the cycling, it was necessary to occasionally brush the soil back onto the track as it gets scattered by the motion of the roller. At the end of the test, the surface was wiped with tissue to remove any loose soil, wiping firmly, but not bearing down.

Results were done in a comparative manner by both examining the soiled test polish and rating it versus a standard polish.

The success of the coating to resist soil is demonstrated by the coated coupon's light readings to be as close to the baseline readings. The wiped final readings of each coupon were compared with the baseline readings obtained for each coupon.

Results: The Johnson Wax had better soil resistance than the MD Stetson product based on the final readings being closer to the baseline levels. Readings listed in the table were based on five readings that were then averaged by the BYK Spectro Guide device.

Cleaner	VCT	baseline	dirty	final	Change	% Change	Ave	Ste Dev
MD Stetson Universal	1	83.76	59.33	60.83	22.93	27.38	28.38	1.204
MD Stetson Universal	2	84.27	58.38	59.23	25.04	29.71		
MD Stetson Universal	3	83.71	59.48	60.23	23.48	28.05		
Johnson floor wax	1	84.72	61.73	63.74	20.98	24.76	25.38	0.5404
Johnson floor wax	2	84.48	61.25	62.83	21.65	25.63		
Johnson floor wax	3	84.36	61.64	62.63	21.73	25.76		

Summary:

Conclusion: Both products had soil adhere to the coated coupons as shown by the >25% drop in L value readings. The Johnson product had slightly better resistance than the MD Stetson product.