CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2010

DateRun: 01/10/2010

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: Visual

Purpose: To determine the ease of removal of floor coating using mechanical scrubbing

Experimental Procedure:

Dried films were conditioned at 37.8°C (100°F) in order to simulate service aging. This method utilizes the Gardner straight-line washability apparatus as a means for controlled removal of the dried films. A heavily weighted pad was employed as a means of arriving at a scrubbing force similar to that of hand scrubbing. In order to distinguish between the relative removal properties of different polishes, the number of oscillations required for complete removal was taken as a measure of removability.

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. The coated tiles were then store in an oven maintained at a temperature of 37°C and condition there for 48 h.

The coated and conditioned panels were placed on the plate of the washability apparatus in such a manner that the oscillating brush will travel at right angles to the longer side of the dried polish film.

The abrasive pad was soaked for at least 1 min in the Green Seal approved stripper (Spartan Green Floor Finish Remover) and then placed in the assembly attached to the weighted (1-kg) boat. The pad/boat was then inverted, and the motor was turned on for one cycle. The unit was left off for 1 min and then restarted. The unit was run for 50 oscillations. The brush was kept wet by adding additional stripper solution dropwise onto the coated panel. After stopping the machine, the tile was removed, rinsed with water and blotted dry. If polish film remained, the process was repeated for an additional 50 oscillations and again examined the film after rinsing and drying. Thereafter, if any film remained, repeat for a maximum of 200 total oscillations.

The report shall include a qualitative rating according to the following terminology:
Removal Ease Number of Oscillations Required for Complete Removal
Excellent <50
Good >50 but <100
Fair >100 but <200
Poor >200

Results:

Wax	Removal at 50 cycles	at 100	at 150	at 200	Rating
Johnson Wax	None	None	Some	Not complete	Poor
	None	None	Some	Not complete	Poor
	None	None	Some	Some	Poor
MD Stetson Universal Wax	Some	All	--	--	Good
	Some	All	--	--	Good
	Some	All	--	--	Good

Summary:

Substrates:	Vinyl Composite Tiles				
Contaminants:	Coatings, Waxes				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Spartan Chemical Company	Green Solutions Floor Stripper	30	0.00	☑	Removed the MD Stetson floor coating within 100 cyles.

Conclusion: The MD Stetson wax was found to have good removal rating (100 cycles). The conventional floor stripper was found to have a poor removal rating (>200 cycles). The products will be evaluated for soil resistance.