

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005
 DateRun: 01/20/2005
 Experimenters: Jason Marshall, Ephraim Massawe
 ClientType: General
 ProjectNumber: Project #1
 Substrates: Other
 PartType: Coupon
 Contaminants: Waxes
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Visual

Purpose: To identify additional floor strippers using a preliminary screening method

Experimental Procedure: Six biobased cleaners were selected from the lab's inventory of biobased alternatives. A seventh non-biobased "green" floor stripper was also included in the screening. An approximate 1 inch square piece of cured coating (4 days) was placed into a glass Petri dish. Each solvent was applied to the coating using a hand held plastic swab and allowed to soak for 10 minutes. Observations were made throughout the ten minute soaking time. At the end of the soaking, each cleaning solution was ranked by two lab personnel to determine which products worked the best. Ranking were based on visually observation for opacity and coating stiffness as compared to an untreated cured sample.

Results: All seven products appeared to have some effect on the cured coating. The non-biobased "green" floor stripper was ranked as having the most success by both staff members. Observations and rankings are listed in the table below.

Cleaning Product	Observations	Rank 1	Rank 2
SolSafe 245	Soft, more transparent than translucent	5	2
Corn Solv	Some softness, translucent	6	6
Soy Solv II Plus	Soft, more transparent than translucent	3	3
Soy Solv	Not soft, mostly opaque	7	7
DBE 5	Very soft, translucent	2	4
DBE 6	Soft, translucent	4	5
Envirostar Green Floor Stripper	Initially became soft, then total dissolved into white solution	1	1

Summary:

Substrates:	Other				
Contaminants:	Waxes				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Bio Chem Systems	Solsafe 245	100		<input checked="" type="checkbox"/>	Rank ~ 3.5
Soysolv Industrial Products	Cornsolv industrial solvent	100		<input checked="" type="checkbox"/>	Rank 6
Soysolv Industrial Products	Soysolv II solvent Plus	100		<input checked="" type="checkbox"/>	Rank 3
Soysolv Industrial Products	Soysolv industrial solvent	100		<input checked="" type="checkbox"/>	Rank 7
Invista S.a.r.l	Flexisolv DBE 5 ester	100		<input checked="" type="checkbox"/>	Rank ~ 3
Invista S.a.r.l	Flexisolv DBE 6 ester	100		<input checked="" type="checkbox"/>	Rank ~ 4.5
Pioneer Eclipse	Enviro Star Green Glass & Surface Cleaner	100		<input checked="" type="checkbox"/>	Rank 1

Conclusion:

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All seven products will be tested using manual wiping in the Gardner Abrasion Tester under conditions similar to the previous trials.