

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2007  
 DateRun: 06/28/2007  
 Experimenters: Andrea Cheeseman  
 ClientType: General  
 ProjectNumber: Project #2  
 Substrates: Fiberglass  
 PartType: Coupon  
 Contaminants: Waxes  
 Cleaning Methods: Manual Wipe  
 Analytical Methods: Visual  
 Purpose: To screen a second batch of potential floor stripping products.

Experimental Procedure: A search of the lab's on-line database at [www.cleansolutions.org](http://www.cleansolutions.org) was conducted to identify additional products that were considered to contain some level of bio-based materials. From this second search an additional 10 products were selected for screen testing. Furthermore, another eight products were identified from on-line sources.

Fiberglass coupons were coated with a layer of Johnson Show Place floor wax and allowed to dry for 30 minutes. During the 30 minutes, a Master Appliance Heat gun was used to speed up the drying process. Two subsequent coating layers were applied follow the same drying process. After application of the third coating, the coupons were allowed to sit overnight for continued drying.

Each bio-based product was applied at full strength to a separate coupon using a plastic squeeze bulb. Approximately, 3 ml of product was applied to the contaminated coupon. The product was allowed to sit for 10 minutes. At the end of this period, the coupons were wiped with a paper towel and the surface was observed for any signs of change resulting from the bio-based product. Successful products were then compared to each other to determine which products performed the best.

Results:

Product	Observations
Citrus Pure Remover	Strong citrus odor, spreads easily and evenly, removes wax if scraped very hard, peels
D-Limonene	Strong citrus/chemical odor, spreads easily and evenly, filmy residual, did not remove wax
Super Bio-Wash	Strong chemical odor, spreads easily and evenly, very cloudy discoloration, filmy residual, did not remove wax
Pinnacle	Thick, did not spread well, cloudy discoloration, filmy residual, did not remove wax
Bean-e-doo	Soybean odor, thin, watery, spreads easily and evenly, did not remove wax
Soy-Strip	Showed signs of removing wax
Emerge	Showed signs of removing wax
Soy-Gel	Showed signs of removing wax
Green Solutions(100)	Sticky, gummy wax removed if scraped hard
Green Solutions(9.2)	Very little wax removed
Cycle Strip (74)	Wax removed if scraped (after 5 minutes of soak)
Cycle Strip (74)	Wax removed if scraped hard, easier than the five minute (10 minutes of soak)

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Household Paint Stripper	Strong odor, sticky, thick, some wax removed if scraped hard
Graffiti Remover	Very strong odor, thick, some wax removed if scraped hard, could be peeled off
SoyStrong	Watery, did not remove wax
Ink Zapper	Very strong odor, water, very little wax removed
Graffiti Remover SAC	Strong odor, very little wax removed, must scrape hard

Summary:

<b>Substrates:</b>	Fiberglass				
<b>Contaminants:</b>	Waxes				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Franmar Chemical	Bean-e-doo (Parts Washer Solvent)	100		<input type="checkbox"/>	
Franmar Chemical	Soy Strip Paint Stripper	100		<input checked="" type="checkbox"/>	
Franmar Chemical	Emerge super infusion surfactant (one gallon NVC)	100		<input checked="" type="checkbox"/>	
Franmar Chemical	Soy Gel Paint Stripper	100		<input checked="" type="checkbox"/>	
Abatement Technologies	Citrus Pure AS850	100		<input type="checkbox"/>	
Florida Chemical Company	D-Limonene	100		<input type="checkbox"/>	
Chemtronics Inc	Super Bio Wash	100		<input type="checkbox"/>	
EcoLink	Pinnacle	100		<input type="checkbox"/>	
Spartan Chemical Company	Green Solutions Floor Stripper	100		<input checked="" type="checkbox"/>	
Spartan Chemical Company	Green Solutions Floor Stripper	9.2		<input checked="" type="checkbox"/>	
The Clean Environment Co	C-8 Cycle Strip	74		<input checked="" type="checkbox"/>	
Vertec BioSolvents	Household Paint Stripper	100		<input checked="" type="checkbox"/>	
SoySafe	Graffiti Remover	100		<input checked="" type="checkbox"/>	
Spartan Chemical Company	Soy Strong	100		<input type="checkbox"/>	
Vertec BioSolvents	Ink Zapper	100		<input type="checkbox"/>	
Spartan Chemical Company	Graffiti Remover SAC	100		<input type="checkbox"/>	

Conclusion:

Three of the products showed signs of removing the wax from the fiberglass coupons during the screening process. These will be tested using mechanical agitation.