CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2007
DateRun:	08/19/2007
Experimenters:	Jason Marshall, Shweta Bansal, Andrea Cheeseman
ClientType:	General
ProjectNumber:	Project #2
Substrates:	Plastic
PartType:	Coupon
Contaminants:	Waxes
Cleaning Methods:	Mechanical Agitation
Analytical Methods:	Visual
Purpose:	To evaluate products using client supplied conditions for products at a longer time interval.
Experimental Procedure:	The successful products from the previous trials were used at 50% dilution at 10 minute cleaning intervals. In addition, several new products that were not previously tested were included in this round of testing. Furthermore, some of the new products were used at lower dilutions as recommended by the vendors. Full vinyl tile coupons (12"x12") were coated with the Johnson Wax Show Place floor coating using a paint brush. The coating was allowed to dry for an hour. After completely dry, additional coats were applied. A total of four coats were used. Each solution was applied to one tile and allowed to soak for 10 minutes. At the end of the soaking, the tile was stripped manually using sections of the scrubbing pad. During scrubbing, hot water was added to the tile and stripping solvent, simulating the procedure witnessed during an on-site visit to the client's facility. Observations were recorded on the effectiveness of the strippers. In addition, three lab personnel independently ranked the strippers for performance. An average of the three assessments were made.
Results:	All Products Used at 50% Dilutions Unless Otherwise Noted. 10 minutes of cleaning

Manufacturer	Product	Stripping Observations	Ranking			
			1= Most Efficient; 19= Least Efficient			
		Employee	1	2	3	Overall Ave
Abatement Technologies	Citrus Pure Remover	Removed a lot of wax	13	11	16	13.3
Bio-Kleen	Super Stripper 1:3	Removed a lot of wax	3	1	3	2.3
Bio-Kleen	Super Stripper 1:5	Removed a lot of wax	4	2	4	3.3
Bi-O-Kleen	SL-100	Some layers of wax removed	17	16	14	15.7
The Clean Environment Co	Cycle-Strip	Removed a lot of wax, softened the remaining wax	9	12	7	9.3
Ecolink	Safe-Strip	Removed a lot of wax	8	10	6	8
EnvirOx, LLC	Grout-Safe	Removed very little wax (1-layer) 16	8	17	13.6	
Finger Lakes Chemicals	Graffiti Remover	Removed a lot of wax, all wax can be peeled off manually, leaves a	1	13	1	5

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		very sticky surface				
Finger Lakes Chemicals	Resineater	Removed a lot of wax, all wax can be peeled off manually, leaves a sticky surface	2	17	2	7
Franmar	Soy-Gel	Removed a lot of wax	10	3	13	8.7
Franmar	Soy-Strip	Removed a lot of wax, can be peeled off manually	6	7	5	6
Gemtek	SC Maxi Solve	Removed a lot of wax	11	6	11	9.3
Green Products LLC	Amaizeing	Looks though no wax removed at all. Better at 5 minutes	12	14	15	13.7
Inland Technologies	Citra-Safe	Oily, does not spread evenly, removed very little wax (1 layer)	18	19	19	18.7
Inland Technologies	EP 921	Removed a lot of wax	15	18	9	14
SoySafe	Graffiti Remover	Not tested, dilution formed solid-like substance				
Soysolv Industrial Products	SoySolv	Oily, does not spread evenly, removed very little wax (1 layer)	19	15	18	17.3
Spartan	Graffiti Remover SAC RTU	Removed a lot of wax	14	4	12	10
Spartan	Green Solutions	Removed a lot of wax	5	5	10	6.7
Vertec	Household Paint Stripper	Not tested, dilution formed solid-like substance				
Vertec	Ink Zapper	Removed a lot of wax, flakey, sticky surface	7	9	8	8

Summary:

Substrates:	Plastic
Contaminants:	Waxes

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Abatement Technologies	Citrus Pure AS850	50	0.00	☐	Rank = 13.3
Bi-O-Kleen Industries	Super Stripper - Floor Wax Remover	33	0.00	☑	Rank = 2.3
Bi-O-Kleen Industries	Super Stripper - Floor Wax Remover	20	0.00	☑	Rank = 3.3
Bi-O-Kleen Industries	Soy Lube- SL 100	50	0.00	☐	Rank = 15.7
The Clean Environment Co	C-8 Cycle Strip	50	0.00	☑	Rank = 9.3
EcoLink	Safe Strip	50	0.00	☑	Rank = 8

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EnvirOx LLC	Grout Safe	50	0.00	☐	Rank = 13.6
Twin Rivers Technologies	Graffiti Remover	50	0.00	☑	Rank = 5
Finger Lakes Chemical	FLSC-12 Resineater Sample	50	0.00	☑	Rank = 7
Franmar Chemical	Soy Gel Paint Stripper	50	0.00	☑	Rank = 8.7
Franmar Chemical	Soy Strip Paint Stripper	50	0.00	☑	Rank = 6
Gemtek Products	Safe Care (SC) Maxi Solv	50	0.00	☑	Rank = 9.3
Green Products	aMAIZEing biobased solvent and stripper	50	0.00	☐	Rank = 13.7
Inland Technologies Inc	Citrasafe	50	0.00	☐	Rank = 18.7
Inland Technologies Inc	EP 921	50	0.00	☐	Rank = 14
Soysolv Industrial Products	Soysolv industrial solvent	50	0.00	☐	Rank = 17.3
Spartan Chemical Company	Graffiti Remover SAC	50	0.00	☑	Rank = 10
Spartan Chemical Company	Green Solutions Floor Stripper	50	0.00	☑	Rank = 6.7
Vertec BioSolvents	Ink Zapper	50	0.00	☑	Rank = 8

Conclusion: The successful products will now be tested at full strength for both 5 and 10 minutes.