

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005
 DateRun: 03/08/2005
 Experimenters: Jason Marshall
 ClientType: Coatings Manufacturer
 ProjectNumber: Project #1
 Substrates: Glass/Quartz
 PartType: Coupon
 Contaminants: Greases, Mold Releases, Waxes, Dirt, Oil
 Cleaning Methods: Manual Wipe
 Analytical Methods:
 Purpose: To identify alternatives for manually cleaning glass.

Experimental Procedure: Using the laboratory's database for solvent cleaning substitution, the lab generated the following lists of products. The first list contains products that have been evaluated at SSL under similar conditions to the client's criteria. The second list contains vendor suggested products based on client supplied data.

Results:

Substrate:	Glass		
Contaminant:	Dirt, silicone, waxes		
Company Name	Product Name	Classification	Wax
AG Environmental Products	Canola Gold CE110	Ester	Wax - Roger Reed 98033 Wax, Hyrdocarbon waxes
Alconox Inc	Alcojet	Powder Detergent-Alkaline	Wax - Blanchard Stacking Wax #5
Bio Chem Systems	Bio T 200 A	Terpene	Wax - Beeswax, Wax - Roger Reed 98033 Wax, Hyrdocarbon waxes
Bio Chem Systems	Bio T Max	Terpene-Semi-Aqueous	Wax
Dynamold Solvents Inc	DS 108	Petroleum Distillate	Wax - Roger Reed 98033 Wax, Hyrdocarbon waxes
Florida Chemical Company	Citrus Burst 7	Terpene	Wax - Roger Reed 98033 Wax, Hyrdocarbon waxes
National Diagnostic	Histo Clear	Terpene	Wax - Beeswax
National Diagnostic	Opti Clear	Terpene	Wax - Beeswax, Wax - Roger Reed 98033 Wax, Hyrdocarbon waxes
Oakite Products	Inproclean 3800	Alkaline Aqueous	Wax, Wax - Beeswax, Wax - Blanchard Stacking Wax #5

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Pentone Corporation	Citrikleen XPC	Terpene-Semi-Aqueous	Wax - Roger Reed 98033 Wax, Hyrdocarbon waxes
Texo Corporation	Texolite 1734 XL	Alkaline Aqueous	Wax - Beeswax
No testing on dirt or silicone for glass substrates			

Vendor Suggested Products

CompanyName	ProductName	Classification	Description
Abatement Technology	Bio Might 100	Alkaline Aqueous	
AG Environmental Products	Canola Gold CE110	Ester	
AG Environmental Products	Soy Clear 1500	Ester	
AG Environmental Products	Soy Gold 1000	Organic	
AG Environmental Products	Soy Gold 2000	Organic	
Alconox Inc	Alcojet	Powder Detergent-Alkaline	
Alconox Inc	Alconox	Powder Detergent	
Alconox Inc	Citranox	Acidic Aqueous	
Alconox Inc	Detergent 8	Alkaline Aqueous	
Alconox Inc	Det-O-Jet	Alkaline Aqueous	
Alconox Inc	Liquinox	Alkaline Aqueous	
Alconox Inc	Luminox	Neutral Aqueous	
Amax Corporation	Safety First	Semi-Aqueous	
Bio Chem Systems	Bio T 200 A	Terpene	
Bio Chem Systems	Bio T 300 B	Terpene-Semi-Aqueous	
Bio Chem Systems	Bio T Foam Plus	Terpene	
Bio Chem Systems	Bio T Max	Terpene-Semi-Aqueous	
Bio Chem Systems	Bio T Parts Washer NR	Terpene	
Bio Chem Systems	Green Stuff (6325)	Alkaline Aqueous	
Bio Chem Systems	Solsafe 245	Petroleum Distillate	
Bi-O-Kleen Industries	Bi-O-Kleen All Purpose	Organic	
Bi-O-Kleen Industries	Bi-O-Kleen Glass Cleaner	Organic	
Bi-O-Kleen Industries	Soy Cream Cleaner	Organic	
Brulin Corporation	Aquavantage 1400	Alkaline Aqueous	
Buckeye International	Shopmaster LPH	Alkaline Aqueous	
Buckeye International	Work Out	Alkaline Aqueous	
Buckeye International	XL 100	Alkaline Aqueous	
By-Pas and Star Products	Star Cleaning Miracle # 50	Alkaline Aqueous	

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Calgon Corporation	SC 844	Organic
Castle International	ion.a.Clean	Alkaline Aqueous
Chemtronics Inc	Super Bio Wash	Semi-Aqueous
Chrisal USA Inc	Super CMF 240	Alkaline Aqueous
Cleaning Systems	Release	Alkaline Aqueous
Cleanline Products	Super H2O2 Citrus Concentrate	Semi-Aqueous
Cogent Environmental Solutions	Ecogent General All Purpose Cleaner	Acidic Aqueous
Cogent Environmental Solutions	F103	Other
CRC Industries	HydroForce Butyl Free All Purpose	Alkaline Aqueous
DuPont	DBE 3	Ester
Dynamold Solvents Inc	DS 104	Petroleum Distillate
Dynamold Solvents Inc	DS 108	Petroleum Distillate
Ecolab	Oasis All Purpose	Alkaline Aqueous
Ecolab	Oasis Glass Cleaner	Acidic Aqueous
Emkay Chemical Company	Safety Wash	Alkaline Aqueous
Emkay Chemical Company	Safety Wash Clear	Alkaline Aqueous
Emkay Chemical Company	Safety Wash CRC	Alkaline Aqueous
EnvirOx LLC	GroutSafe	Alkaline Aqueous
EnvirOx LLC	H2Orange2	Terpene-Semi-Aqueous
Finger Lakes Chemical	Safer Stuff	Terpene
Florida Chemical Company	Citrus Burst 7	Terpene
Florida Chemical Company	D-Limonene	Terpene
Gemtek Products	EZ Solv	Organic
Gemtek Products	SC 1000	Alkaline Aqueous
Gemtek Products	SC Aircraft & Metal Cleaner	Alkaline Aqueous
Gemtek Products	SC Supersolve	Organic
Hotsy Cleaning Systems	Hotsy Detergents Tub & Pressure Wash	Alkaline Aqueous
Innovative Organics Inc	Amberclean L 12	Alkaline Aqueous

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Innovative Organics Inc	Amberclean Q3	Alkaline Aqueous
International Products Corporation	LF 2100	Alkaline Aqueous
International Products Corporation	Micro	Alkaline Aqueous
International Products Corporation	Micro 90	Alkaline Aqueous
ITW Fluid Products Group	AccuClean	Alkaline Aqueous
Kyzen Corporation	Ionox HC 2	Alcohol
Lifetime Solutins Ltd	Commercial All Purpose	Alkaline Aqueous
Liffetime Solutins Ltd	Eco All Purpose	Neutral Aqueous
LPS Laboratories	Micro X	Hydrocarbon
Magnaflux	Daraclean 200	Alkaline Aqueous
Magnaflux	Daraclean 212	Neutral Aqueous
Magnaflux	Daraclean 235	Neutral Aqueous
Magnaflux	Daraclean 282	Alkaline Aqueous
Magnaflux	Daraclean 282 GF	Alkaline Aqueous
Magnaflux	Daraclean 283	Alkaline Aqueous
MD Stetson	101 Neutral and Glass Cleaner	Neutral Aqueous
MD Stetson	LAV Safe	Neutral Aqueous
National Diagnostic	Histo Clear	Terpene
National Diagnostic	Opti Clear	Terpene
Nensco Supply	USA Wash	Petroleum Distillate
Orison Marketing	VPW SC 1000	Organic
Permatex Industrial Corporation	Natural Blue	Alkaline Aqueous
Phase III Inc	California Parts Washer Solution	Neutral Aqueous
Ramsey Company	Free Fall	Semi-Aqueous
Rochester Midland Corp	EnviroCare Washroom Cleaner	Alkaline Aqueous
Rochester Midland Corp	Glass Cleaner	Acidic Aqueous
Rochester Midland Corp	Tough Job	Alkaline Aqueous
Safe Science Inc	Safe Science Concrete/ Graffiti (Industrial)	Alkaline Aqueous

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Safe Science Inc	Safe Science Engine Degreaser (Industrial)	Terpene
Savogran Company	Dirtex Prepaint Cleaner	Alkaline Aqueous
Savogran Company	HD-34 Cleaner Degreaser	Semi-Aqueous
Simple Green	All Purpose Cleaner/ Degreaser	Alkaline Aqueous
Simple Green	Crystal Simple Green Industrial Cleaner	Alkaline Aqueous
Simple Green	Simple Green D	Alkaline Aqueous
Solvent Kleene Inc	D Greeze 500 LO	Organic
SWR Corporation	SWR One	Alkaline Aqueous
Tarksol Inc	Tarksol HTF 40	Terpene-Semi-Aqueous
Tech Spray Inc	Concentrated Aqueous Defluxer	Caustic
The Clean Environment Co	All Purpose N-1	Neutral Aqueous
The Clean Environment Co	Basin, Tub and Tile Cleaner	Neutral Aqueous
The Clean Environment Co	Glass and Hard Surface Cleaner	Alcohol-Semi Aqueous
The Clean Environment Co	Super Orange Clean	Terpene-Semi-Aqueous
Today & Beyond	Beyond 2007	Alcohol
US Polychem Corporation	Polychem 2000 P	Alkaline Aqueous
US Polychem Corporation	Polychem A 2000 XS	Alkaline Aqueous
US Polychem Corporation	Polychem DEOX 007	Alkaline Aqueous
US Polychem Corporation	Polychem PW 147	Alkaline Aqueous
US Polychem Corporation	Polychem Ultra CR	Alkaline Aqueous
US Polychem Corporation	Polyspray Jet 790 C	Caustic
US Polychem Corporation	Polyspray Jet 790 P	Alkaline Aqueous
US Polychem Corporation	Polyspray Jet 790 XS	Alkaline Aqueous
Valtech Corporation	Valtron SP 2200	Alkaline Aqueous
Vertec BioSolvents	VertecBio Gold 2	Organic
Water	Steam	Neutral Aqueous
Water	Water	Neutral Aqueous

Summary:

Substrates:	Glass/Quartz
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Contaminants:	Greases, Mold Releases, Waxes, Dirt, Oil				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
No Specific Vendor	Supplied alternatives list			<input type="checkbox"/>	

Conclusion:

Cleaning varies from case to case. The SSL recommends process specific testing on potential replacement cleaning chemicals. If more information is needed on a particular product, or you are interested in conducting cleaning trials, please contact the lab at (978)934-3133.