CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2005
DateRun:	02/10/2005
Experimenters:	Jason Marshall
ClientType:	General
ProjectNumber:	Project #1
Substrates:	Glass/Quartz, Plastic
PartType:	Coupon
Contaminants:	Coatings
Cleaning Methods:	Manual Wipe
Analytical Methods:	
Purpose:	Looking to remove the lens coating found on all Nikon lenses. The coating blocks UV and IR Light.
Experimental Procedure:	Using the laboratory's database for solvent cleaning substitution, the lab generated two lists of products. The first contains products that have been evaluated at SSL under similar conditions to the client's criteria. The second list contains products recommended by vendors that may not have been evaluated at the lab.
Results:	Coating type removed: Coating - PPG Industries, Inc. Hi-Gard 1035 coating (71-23-8, 67-56-1, 64-17-3

CompanyName	ProductName	ClassificationDescription
Alconox Inc	Citranox	Acidic Aqueous
Bio Chem Systems	Bio T Max	Terpene-Semi-Aqueous
Buckeye International	Shopmaster	Alkaline Aqueous
Calgon Corporation	Geo Guard 3015	Acidic Aqueous
Chem Tech Solutions	Westech CT-4712	Acidic Aqueous
Dynamold Solvents Inc	DS 104	Petroleum Distillate
Finger Lakes Chemical	Safer Stuff	Terpene
Florida Chemical Company	Citrus Burst 7	Terpene
Gemtek Products	SC Supersolve	Organic
Heatbath Corporation	MultiKleen LX 1573	Alkaline Aqueous
Inland Technologies Inc	EP 921	Organic
Kyzen Corporation	Ionox FCR	Semi-Aqueous
Kyzen Corporation	Ionox HC 2	Alcohol
PCI of America	Hurrisafe 9575	Alkaline Aqueous
Univar USA Inc	Pot Ash Liquid	Caustic
US Polychem Corporation	Polyspray Jet 790 XS	Alkaline Aqueous

Vendor recommended products for coating removal

Company	Product	Classification
3M	HFE 7200	HFE
AG Environmental Products	Canola Gold CE110	Ester
		Ester

CLEANING LABORATORY EVALUATION SUMMARY

AG Environmental Products	Soy Clear 1500	
AGA Chemical	AK 225	HCFC
Alconox Inc	Alcojet	Powder Detergent-Alkaline
Alconox Inc	Alconox	Powder Detergent
Alconox Inc	Det-O-Jet	Alkaline Aqueous
Amax Corporation	Safety First	Semi-Aqueous
Bio Chem Systems	Bio T Foam Plus	Terpene
Bio Chem Systems	Green Stuff (6325)	Alkaline Aqueous
Bio Chem Systems	Solsafe 245	Petroleum Distillate
BioGenesis Enterprises Inc	BG Solv 717 Ink & Graffiti Cleaner	Semi-Aqueous
Buckeye International	XL 100	Alkaline Aqueous
Church & Dwight Co Inc	Armaklean E 2001	Alkaline Aqueous
Church & Dwight Co Inc	Armaklean E 2002	Alkaline Aqueous
CRC Industries	HydroForce Butyl Free All Purpose	Alkaline Aqueous
CSA Inc	Bio Safe 1023	Hydrocarbon
CSA Inc	Bio Safe 1024	Hydrocarbon
DuPont	DBE 3	Ester
Dynamold Solvents Inc	DS 108	Petroleum Distillate
Ecolink	2005	HCFC
Ecolink	Heavy Weight Non Butyl Detergent	Alkaline Aqueous
Ecolink	Safe Strip	Organic
Finger Lakes Chemical	1-1-02	Terpene
Finger Lakes Chemical	Safer Stuff	Terpene
Florida Chemical Company	Citrus Burst 7	Terpene
Gemtek Products	EZ Solv	Organic
Gemtek Products	SC Supersolve	Organic
General Chemical Corporation	Aluminex 5834	Alkaline Aqueous
General Chemical Corporation	Aquaclean 4784	Caustic
Hubbard Hall Inc	Ram Charger	Alkaline Aqueous
Inland Technologies Inc	Citrasafe	Terpene
Inland Technologies Inc	EP 921	Organic
ISP Technologies	Ship Shape Resin Cleaner	Organic
	7360	Ester

CLEANING LABORATORY EVALUATION SUMMARY

Loctite Corporation		
LPS Laboratories	LPS Precision Clean	Alkaline Aqueous
LPS Laboratories	Micro X	Hydrocarbon
National Diagnostic	Histo Clear	Terpene
National Diagnostic	Opti Clear	Terpene
Oakite Products	Citradet	Semi-Aqueous
Occidental Chemical Corporation	OXSOL 100	Organic
Orison Marketing	VPW SC 1000	Organic
PCI of America	Hurrisafe 9575	Alkaline Aqueous
Permatex Industrial Corporation	Natural Blue	Alkaline Aqueous
Phase III Inc	California Parts Washer Solution	Neutral Aqueous
Pollux Company	Force 9	Ester
Savogran Company	HD-34 Cleaner Degreaser	Semi-Aqueous
SWR Corporation	SWR One	Alkaline Aqueous
Tarksol Inc	Tarksol HTF 85 B	Alcohol-Organic
Today & Beyond	Beyond 2001	Alkaline Aqueous
Today & Beyond	Beyond 2003	Alkaline Aqueous
Today & Beyond	Beyond 2004	Alkaline Aqueous
Today & Beyond	Beyond 2005	Alkaline Aqueous
Today & Beyond	Beyond 2006	Alkaline Aqueous
Today & Beyond	Beyond 2007	Alcohol
Twin Rivers Technologies	Methyl Ester 1618	Ester
Universal Photonics	Uni Clear II	Petroleum Distillate
US Polychem Corporation	87 RB	Hydrocarbon
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	Polyspray Jet 790 C	Caustic
US Polychem Corporation	Polyspray Jet 790 P	Alkaline Aqueous
US Polychem Corporation	Polyspray Jet 790 XS	Alkaline Aqueous
Vertec BioSolvents	VertecBio Gold 2	Organic

Summary:

Substrates:	Glass/Quartz, Plastic

CLEANING LABORATORY EVALUATION SUMMARY

Contaminants:	Coatings				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
No Specific Vendor	Supplied alternatives list		0.00	☐	

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.