CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2003
DateRun:	09/08/2003
Experimenters:	Jason Marshall
ClientType:	Manufacturing
ProjectNumber:	Project #1
Substrates:	Aluminum
PartType:	Coupon
Contaminants:	Coatings, Cutting/Tapping Fluids, Greases, Inks, Lubricating/Lapping Oils, Waxes, Dirt, Oil
Cleaning Methods:	Ultrasonics
Analytical Methods:	
Purpose:	To generate a list of products that could be used to replace alcohol in various cleaning operations.
Experimental Procedure:	Using the laboratory's database for solvent cleaning substitution, the lab generated the following lists of products. The products have been evaluated at SSL under similar conditions to the client's criteria.
Results:	The lab generated two lists of products that have been used to remove various contaminants using ultrasonic cleaning. The first table is a list of the metal working fluids and the second table is the products used to remove inks, coatings and waxes.

Contaminant	Company Name	Product Name	Total
Cutting/ Tapping Fluids	AW Chesterton	181 Low Alkaline Cleaner	1
Cutting/ Tapping Fluids	DA Stuart Company	Dasco Kleen 3250	2
Cutting/ Tapping Fluids	Ecolink	Bulldog	1
Cutting/ Tapping Fluids	Heatbath Corporation	Multi-Kleen 1568	1
Cutting/ Tapping Fluids	Houghton International	Certa Kleen 5387	1
Cutting/ Tapping Fluids	Innovative Organics Inc	Amberclean Q3	1
Cutting/ Tapping Fluids	Metabolix Inc	Metabolix E3HB	4
Cutting/ Tapping Fluids	Oakite Products	Inproclean 3800	2
Cutting/ Tapping Fluids	Phase III Ink	California Parts Washer Solution	1
Cutting/ Tapping Fluids	Simple Green	Crystal Simple Green Industrial Cleaner	1
Cutting/ Tapping Fluids	Today & Beyond	Beyond 2001	2
Cutting/ Tapping Fluids	Watson Technical Associates	Watson Formula 7300	2
Greases	Bio Chem Systems	Green Stuff (6325)	1
Greases		EXP 1400	2

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	Brulin Corporation		
Greases	Brulin Corporation	Formula 815 GD	3
Greases	Gemtek Products	SC Aircraft & Metal Cleaner	1
Greases	International Products Corporation	Micro 90	1
Greases	International Products Corporation	Surface Cleanse 930	1
Greases	Magnaflux	Daraclean 282 GF	2
Greases	Matchless Metal Polish Company	MC 132	2
Greases	Metabolix Inc	Metabolix E3HB	2
Greases	Oakite Products	Inproclean 3800	3
Greases	Simple Green	Crystal Simple Green Industrial Cleaner	2
Greases	Texo Corporation	Texolite 1734 XL	1
Greases	Today & Beyond	Beyond 2001	2
Greases	Today & Beyond	Beyond 2005	1
Greases	Tomah Products	Tomadyne Mix	1
Greases	United Laboratories	United 450 All Clear	2
Greases	US Polychem Corporation	Polychem A 2000 XS	1
Greases	Valtech Corporation	Valtron SP 2250 2LF	5
Greases	Watson Technical Associates	Watson Formula 7300	2
Oil	Alconox Inc	Citranox	4
Oil	Alconox Inc	Det-O-Jet	1
Oil	Alconox Inc	Liquinox	1
Oil	AW Chesterton	KPC 820 N	1
Oil	Bio Chem Systems	Green Stuff (6325)	10
Oil	Brulin Corporation	Formula 815 GD	9
Oil	CAE Cleaning Technologies	Evercycle UCI	1
Oil	Calgon Corporation	AK 6215	5
Oil	Carroll Company	Blue Gold Industrial Cleaner	2
Oil	Church & Dwight	Armakleen M Auto	2
Oil	Fine Organic Corporation	FO 2085 M	1
Oil	Gemtek Products	SC Supersolve	1

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Oil	Heatbath Corporation	Uni Kleen 10	1
Oil	Kyzen Corporation	Ionox HC 2	1
Oil	MacDermid	ND 17	2
Oil	MacDermid	ND LF Supreme	1
Oil	Magnaflux	Daraclean 212	1
Oil	Magnaflux	Daraclean 232	2
Oil	Magnaflux	Daraclean 235	2
Oil	Magnaflux	Daraclean 282	12
Oil	Magnaflux	Daraclean 282 GF	12
Oil	Magnaflux	Daraclean 283	10
Oil	Magnaflux	Zyglo Emulsifier ZR 10B	4
Oil	Man Gill Chemical	Gillite 0650 Cl	1
Oil	Matchless Metal Polish Company	MC 580	2
Oil	Metabolix Inc	Metabolix E3HB	4
Oil	Oakite Products	Inproclean 3800	14
Oil	Oakite Products	Inproclean 4000 T	1
Oil	Sky Products Company Inc.	Cleaner #10	2
Oil	Today & Beyond	Beyond 2001	10
Oil	US Polychem Corporation	Polychem A 2000 XS	3
Oil	Valtech Corporation	Valtron SP 2200	3
Oil	Valtech Corporation	Valtron SP 2275	4
Oil	Warren Chemical Company	Sea Wash 700 New	1
Oil	Warren Chemical Company	Sea Wash Neutral	2

Other Contaminants

Contaminant	Company Name	Product Name	Total
Coatings	Bio Chem Systems	Solsafe 245	2
Coatings	Chrisal USA Inc	Super CMF 240	1
Coatings	DA Stuart Company	Dasco Kleen 3250	11
Coatings	Dynamold Solvents Inc	DS 108	1
Coatings	Ecolink	Safe Strip	2
Coatings	Florida Chemical Company	Citrus Burst 7	1
Coatings			7

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	Heatbath Corporation	Multi-Kleen 1568	
Coatings	Houghton International	Certa Kleen 5387	10
Coatings	Innovative Organics Inc	Amberclean 527 L	1
Coatings	Kyzen Corporation	Ionox FCR	1
Coatings	Kyzen Corporation	Ionox HC 2	2
Coatings	Oakite Products	Inproclean 3800	11
Coatings	Today & Beyond	Beyond 2001	14
Coatings	Univar USA Inc	Pot Ash Liquid	1
Coatings	Vertec BioSolvents	VertecBio Gold 2	1
Inks	AW Chesterton	181 Low Alkaline Cleaner	1
Inks	Gemtek Products	SC 1000	1
Inks	Loctite Corporation	7360	1
Inks	Metabolix Inc	Metabolix E3HB	4
Inks	Simple Green	Crystal Simple Green Industrial Cleaner	1
Inks	Solvent Kleene Inc	D Greeze 500 LO	1
Waxes	Alconox Inc	Alcojet	1
Waxes	Bio Chem Systems	Bio T 200 A	1
Waxes	Metabolix Inc	Metabolix E3HB	2
Waxes	National Diagnostic	Histo Clear	1
Waxes	National Diagnostic	Opti Clear	1
Waxes	Oakite Products	Inproclean 3800	1
Waxes	Texo Corporation	Texolite 1734 XL	2

Summary:

Substrates:	Aluminum
Contaminants:	Coatings, Cutting/Tapping Fluids, Greases, Inks, Lubricating/Lapping Oils, Waxes, Dirt, Oil

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.