CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2002

DateRun: 08/25/2002

Experimenters: Jason Marshall

ClientType: Lab

ProjectNumber: Project #1

Substrates: Electronics

PartType: Coupon

Contaminants: Fluxes, Solder, Films

Cleaning Methods:

Analytical Methods:

Purpose: To find a new process that will not leave white film behind

Experimental Procedure: Using SSL's database of test results, several products were found that have been used successfully to remove flux and solder. The are listed below.

Results: Table 1. Flux Trials

CompanyName	ProductName	Classification	Total	Number of Trials: Contaminant Cleaned	Number of Trials: Contaminant Cleaned	Number of Trials: Contaminant Cleaned
Alconox, Inc.	Detergent 8	Alkaline Aqueous	5	5: Flux - Kester Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)		
Bio Chem Systems	Bio T Max	Terpene-Semi-Aqueous	4	2: Flux - Kester Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)	2: Flux - Wave Flux, RMA Flux (7440-31-5, 7439-92-1, 7740-69-9, 6597-06-0, 6852-86-3, 98-55-5, 8009-03-8)	
Bio Chem Systems	Bio T Parts Washer NR	Terpene	6	6: Flux		
Bio Chem Systems	Green Stuff (6325)	Alkaline Aqueous	6	6: Flux		
Buckeye International	Shopmaster RC	Ester	8	4: Flux	4: Flux (67-63-0, 67-56-1, 8050-09-7)	
Calgon Corporation	Geo Guard 2215	Alkaline Aqueous	1	1: Flux - Rosin Solder Flux		
Church & Dwight	Armaklean E 2001	Alkaline Aqueous	2	2: Flux		
Church & Dwight	Armaklean E 2002	Alkaline Aqueous	6	4: Flux - Kester Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)	2: Flux - RMA flux	
Dynamold Solvents, Inc.	DS-104	Petroleum Distillate	10	5: Flux	5: Flux (67-63-0,	

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					67-56-1, 8050-09-7)	
Dynamold Solvents, Inc.	DS-108	Petroleum Distillate	10	5: Flux	5: Flux (67-63-0, 67-56-1, 8050-09-7)	
EMKAY Chemical Co	Safety Wash CRC	Alkaline Aqueous	3	3: Flux		
International Products Corp	LF 2100	Alkaline Aqueous	5	5: Flux - Kester Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)		
Kyzen Corporation	Ionox HC 2	Alcohol	3	3: Flux - Wave Flux, RMA Flux (7440-31-5, 7439-92-1, 7740-69-9, 6597-06-0, 6852-86-3, 98-55-5, 8009-03-8)		
Magnum Research	Aluminum Aerowash	Alkaline Aqueous	3	3: Flux - Kester Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)		
Oakite Products	Inproclean 4000 T	Terpene-Organic	3	3: Flux - Kester Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)		
Safe Science	Engine Degreaser	Terpene	11	3: Flux	8: Flux - RMA Alpha	
Savogran	Dirtex Prepaint Cleaner	Alkaline Aqueous	1	1: Flux		
Solvent Kleene, Inc.	D-Greeze 1000	Petroleum Distillate	8	4: Flux	4: Flux (67-63-0, 67-56-1, 8050-09-7)	
SWR Corp	SWR One	Alkaline Aqueous	3	3: Flux - Kester Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)		
Today & Beyond	Beyond-2001	Alkaline Aqueous	20	14: Flux	6: Flux - Ersin 5381 RMA Flux	
Today & Beyond	Beyond-2002	Alkaline Aqueous	18	12: Flux	6: Flux - Ersin 5381 RMA Flux	
Today & Beyond	Beyond-2003	Alkaline Aqueous	12	12: Flux		
Today & Beyond	Beyond-2004	Alkaline Aqueous	18	12: Flux	6: Flux - Ersin 5381 RMA Flux	
	Beyond-2005		18	6: Flux		

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Today & Beyond		Alkaline Aqueous			6: Flux - Ersin 5381 RMA Flux	6: Flux (67-63-0, 67-56-1, 8050-09-7)
Today & Beyond	Beyond-2009	Organic	3	1: Flux	1: Flux - Ersin 5381 RMA Flux	1: Flux (67-63-0, 67-56-1, 8050-09-7)
U.S. Polychem Corp.	Hydropurge HPL 790	Caustic	1	1: Flux		

Table 2. Solder Trials

CompanyName	ProductName	Classification	Total	Number of Trials: Contaminant Cleaned	Number of Trials: Contaminant Cleaned
Bio Chem Systems	Bio T Max	Terpene-Semi-Aqueous	4	2: Flux - Kester Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)	2: Solder
Bio Chem Systems	SOLSAFE 245	Petroleum Distillate	1	1: Solder - Emerson & Cuming Eccobons Solder 59C (7440-22-4, 108-88-3, Silicone Resin)	
Calgon Corporation	Geo Guard 2215	Alkaline Aqueous	1	1: Flux - Rosin Solder Flux	
Church & Dwight	Armaklean E 2002	Alkaline Aqueous	4	4: Flux - Kester Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)	
Dynamold Solvents, Inc.	DS-104	Petroleum Distillate	1	1: Solder - Emerson & Cuming Eccobons Solder 59C (7440-22-4, 108-88-3, Silicone Resin)	
Dynamold Solvents, Inc.	DS-108	Petroleum Distillate	1	1: Solder - Emerson & Cuming Eccobons Solder 59C (7440-22-4, 108-88-3, Silicone Resin)	
Oakite Products	Inproclean 4000 T	Terpene-Organic	3	3: Flux - Kester Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)	
SWR Corp	SWR One	Alkaline Aqueous	6	3: Flux - Kester	3: Solder

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				Solder 1544 Rosin Solder flux (64-17-5, 78-92-2, 8050-09-7)	

Summary:

Substrates:	Electronics				
Contaminants:	Fluxes, Solder, Films				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
No Specific Vendor	Supplied alternatives list		0.00	☐	

Conclusion: Cleaning projects vary from case-to-case. To obtain more detailed information about any of the products listed, contact the lab at (978)934-3133.