CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2011

DateRun: 07/27/2011

Experimenters: Heidi Wilcox, Johnny Le, Mahima Tank

ClientType: Microelectronics Mfr

ProjectNumber: Project #2

Substrates: Electronics

PartType: Coupon

Contaminants: Solder

Cleaning Methods: Ultrasonics

Analytical Methods: Visual

Purpose: To evaluate cleaners for their effectiveness in removing lead and lead free solder on electronic parts with low odor.

Experimental Procedure: Six cleaning products were chosen from the labs database, www.cleanersolutions.org to be used in the trial. Six parts were chosen from those supplied by the client to be cleaned by room temperature ultrasonics. Each part was cleaned in the smallest Branson unit that could handle each part. The parts were cleaned for 10 minutes and then rinses in tap water at the sink and dried by compressed air blow off. Both rinse and drying were done for approximately 30 seconds. The parts were then bagged for transport back to the client.

Results: Parts will be sent back to the client to determine which cleaners worked if any.

Mfr	Product	Observations
MAS Products	Bio Solv	Solder joints have corroded, dull look, no odor
Buckeye Int	Shopmaster RC	Residue on board, joints look better. No odor
Gentek	SC Soyester	Nasty residual odor, lots of flux left
AG Environ. Prod	Soygold 2000	Nasty odor. Residue on board, not fully cleaned
Bio Chem Systems	Solsafe 245	Better, one component on board not clean. Joints lost shine
Gemtek	EZ Solv	Not too bad. Joints lost some shine

Summary:

Substrates:	Electronics				
Contaminants:	Solder				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Phoenix Resins Inc	BioSolv	100	0.00	☐	
Buckeye International	Shopmaster RC	5	0.00	☑	better rinsing needed
Gemtek Products	SC Soyester	100	0.00	☐	
AG Environmental Products	Soy Gold 2000	100	0.00	☐	
Bio Chem Systems	Solsafe 245	100	0.00	☑	
Gemtek Products	SC EZ Solv Safety Solvent	100	0.00	☑	

Conclusion: Parts are being sent back for the client to check for cleanliness in their facility. They will notify the lab which products cleaned then we will screen the cleaners that were effective for performance for odor and test those cleaners at the facility to see how the worker effected by the cleaner smell feels.