CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1996

DateRun: 02/26/1996

Experimenters: Jay Jankauskas

ClientType: Electronics Manufacturer

ProjectNumber: Project #1

Substrates: Plastic, Electronics

PartType: Part

Contaminants: Fluxes

Cleaning Methods: Immersion/Soak

Analytical Methods: Visual, microscopic

Purpose: To replace the current Genesolve 2004

Experimental Procedure: The purpose of this trial is to find a replacement chemistry and/or process to replace the current Genesolve 2004 used by Electronics Manufacturer. All chemistries will be tested in a beaker with stir-bar agitation, and all chemistries except the Asashiklin will be tested in the Crest 40kHz Ultrasonic unit. After drying was complete, the parts were analyzed under a microscope for remaining flux, residual cleaning chemistry or detrimental effects to the parts. All parts were then sealed and shipped to David Norton of Electronics Manufacturer for further evaluation.
SUBSTRATE MATERIAL: Electronic Components
CONTAMINANTS: RMA flux
CONTAMINATING PROCESS USED: Received contaminated from Electronics Manufacturer

Results: Although the ultrasonics removed all of the flux for all four chemistries, pitting was noticed on the part's surface. The other three aqueous chemistries did not fare so well under stir-bar agitation.

Product	Concentration	Temperature	Effective
Detergent 8	4	68	No
Armakleen E 2002	4	68	Yes
Daraclean 282 GF	4	68	No
Amberclean SC 11	4	68	No
AK 225	100	68	No

Summary:

Substrates:	Plastic, Electronics
Contaminants:	Fluxes

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Alconox Inc	Detergent 8	4	0.00	☐	
Church & Dwight Co Inc.	Armakleen E 2002	4	0.00	☑	
Magnaflux	Daraclean 282 GF	4	0.00	☐	
Innovative Organics Inc	Amberclean SC 11	4	0.00	☐	
AGA Chemical	AK 225	100	0.00	☐	

Conclusion: The Armakleen E-2002 did an excellent job of removing all flux with just stir-bar agitation in 15 minutes (appeared to perform as good if not better than Asahiklin).