

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1996

DateRun: 02/12/1996

Experimenters: Jay Jankauskas

ClientType: Electronics Manufacturer

ProjectNumber: Project #1

Substrates: Plastic, Electronics

PartType: Coupon

Contaminants: Adhesive, Coatings

Cleaning Methods: Immersion/Soak

Analytical Methods: Black light

Purpose: Removal of conformal coatings

Experimental Procedure: The purpose of this trial is to find a chemistry that removes conformal coatings for Electronics Manufacturer.  
4 Circuit boards were coated with the Humiseal and allowed to cure for six days. One circuit board was cleaned with each chemistry. Cleaning time took place for 10 minutes. Rinsing was performed with DI water at 80 F for 1 minute. The circuit boards were dried under UV light for 20 minutes. The Circuit boards were then evaluated under black light.  
SUBSTRATE MATERIAL: Circuit Boards  
CONTAMINANTS: Humiseal 1B31  
CONTAMINATING PROCESS USED: Coating applied on with a brush and allowed to set for 6 days

Results: Positron- The Humiseal was slightly tacky after 10 minutes, non-volatile so it has to be rinsed. Rinsing would have to be performed with a solvent.  
Ecolink 2005- Removed almost all of the Humiseal. Small deposits remained on the circuit boards. I believe that this is dissolved Humiseal that is deposited on the circuit boards as the Ecolink 2005 evaporates. Looks very positive Impress Wash- After 10 minutes, some of the humiseal was dissolved, the circuit board was immersed for another 10 minutes, but removal was not increased too much. All in all, not to impressive.  
NMP- Will remove the humiseal, but will have to be rinsed with another solvent. There may be some toxicity questions.

Summary:

<b>Substrates:</b>		Plastic, Electronics			
<b>Contaminants:</b>		Adhesive, Coatings			
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
EcoLink	Positron	100		<input type="checkbox"/>	
ISP Technologies	N Methyl Pyrrolidone	100		<input checked="" type="checkbox"/>	
EcoLink	2005	100		<input checked="" type="checkbox"/>	
Finger Lakes Chemical	Impress Wash	15		<input type="checkbox"/>	

Conclusion: Two chemistries showed potential the Ecolink 2005 and the NMP.