

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004  
 DateRun: 05/11/2004  
 Experimenters: Dave Hout  
 ClientType: Lab  
 ProjectNumber: Project #1  
 Substrates: Aluminum  
 PartType: Coupon  
 Contaminants: Solder  
 Cleaning Methods: Immersion/Soak  
 Analytical Methods: Gravimetric

Purpose: Laboratory evaluations of alternative cleaning products

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning. Three products were used at full strength and four products were heated to 130 F on a hot plate. Twenty-one preweighed coupons were coated with Emerson & Cuming Eccobond Solder 59c and allowed to dry for a half an hour and reweighed. Three coupons were cleaned in each solution for 5 minutes using stir-bar-agitation, rinsed in a tap water bath for 15 seconds at 120 F and dried using air blow off for 30 seconds at 68 F. Coupons were allowed to dry for a half an hour and then reweighed a final time. Efficiencies were calculated.

## Results:

### Summary:

<b>Substrates:</b>		Aluminum				
<b>Contaminants:</b>		Solder				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>	
ISP Technologies	Ship Shape Resin Cleaner	100	4.68	<input type="checkbox"/>		
Invista S.a.r.l	Flexisolv DBE 3 ester	100	7.99	<input type="checkbox"/>		
EcoLink	VG 151	100	1.61	<input type="checkbox"/>		
US Polychem Corporation	Polychem A 2000 P	5	2.06	<input type="checkbox"/>		
US Polychem Corporation	Polychem Ultra CR	5	13.10	<input type="checkbox"/>		

Conclusion: All products were ineffective at removing the contaminant.