

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003
 DateRun: 10/20/2003
 Experimenters: Dave Hout
 ClientType: Lab
 ProjectNumber: Project #1
 Substrates: Aluminum
 PartType: Coupon
 Contaminants: Coatings
 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. Four products were used at full strength at room temperature and another four were heated to 130 F on a hot plate. Twenty-four preweighed coupons were coated with PPG-Industries Hi Gord 103J 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:

Substrates:		Aluminum				
Contaminants:		Coatings				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:	
Finger Lakes Chemical	Safer Stuff	100	100.15	<input checked="" type="checkbox"/>		
Man Gill Chemical Company	Gillite 1156	130	99.68	<input checked="" type="checkbox"/>		
National Diagnostic	Histo Clear	100	96.13	<input type="checkbox"/>		
Universal Photonics	Uni Clear	100	98.39	<input checked="" type="checkbox"/>		
Today & Beyond	Beyond 2003	5	97.82	<input type="checkbox"/>		
US Polychem Corporation	Polychem A 2000 P	5	-354.08	<input type="checkbox"/>		
Buckeye International	XL 100 Cleaner & Degreaser	5	135.08	<input type="checkbox"/>		
Dow Chemical Company	PnB Glycol Ether	5	87.97	<input checked="" type="checkbox"/>		

Conclusion: All products were effective at an efficiency rate of over 85% except for the product Polychem 2000P and XL 100.