

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003
DateRun: 10/17/2003
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 Ferrocote 581 LVO 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	89.94	<input checked="" type="checkbox"/>		
Man Gill Chemical Company	Gillite 1156	100	57.99	<input type="checkbox"/>		
National Diagnostic	Histo Clear	100	97.31	<input checked="" type="checkbox"/>		
Universal Photonics	Uni Clear	100	89.28	<input checked="" type="checkbox"/>		
Today & Beyond	Beyond 2003	5	71.59	<input type="checkbox"/>		
US Polychem Corporation	Polychem A 2000 P	5	92.21	<input checked="" type="checkbox"/>		
Buckeye International	XL 100 Cleaner & Degreaser	5	92.06	<input checked="" type="checkbox"/>		
Dow Chemical Company	PnB Glycol Ether	5	99.87	<input checked="" type="checkbox"/>		

Conclusion: Three out of the four products used at 100% were effective at an efficiency rate of over 85%. Three out of the four products used at 5% were also effective at the same efficiency rate.