

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004
 DateRun: 03/04/2004
 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. Three products were used at full strength and one product was heated to 130 F on a hot plate. Twelve preweighed coupons were coated with PPG Industries Hi Gord 1035 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:
Calgon Corporation	Geo Guard 3015	5	100.28	<input checked="" type="checkbox"/>	
ISP Technologies	Ship Shape Resin Cleaner	100	94.66	<input checked="" type="checkbox"/>	
Dow Chemical Company	XUS 40571 Development Solvent	100	108.36	<input type="checkbox"/>	
Dow Chemical Company	XUS 40579 Development Solvent	100	95.61	<input checked="" type="checkbox"/>	

Conclusion: Three of the four products were effective at removing the contaminants at an efficiency rate >94%. One may have been attacking the aluminum substrate as the removal was over 108%.