

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004  
DateRun: 03/05/2004  
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:

<b>Substrates:</b>		Aluminum			
<b>Contaminants:</b>		Coatings			
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
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%. On may have been attacking the aluminum substrate as the removal was over 108%.