

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003
DateRun: 09/09/2003
Experimenters: Jason Marshall
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. Five products were used at full strength, heated to 120 F on a hot plate. Fifteen preweighed coupons were coated with Quaker Chemical Ferrocoat 5815-LVO protective coating and allowed to dry overnight 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 overnight and then reweighed a final time. Efficiencies were calculated.
Note: Bio T Foam Plus was sprayed onto coupons at room temperature and allowed to sit for 5 minutes. The cleaner was then wiped clean.

Results: Only one product removed over 85% of the coating. The other four may be effective with longer cleaning times or the use of additional mechanical energy.

Summary:

Substrates:	Aluminum					
Contaminants:	Coatings					
Company Name:		Product Name:	Conc.:	Efficiency:	Effective:	Observations:
AW Chesterton		278 Super Solv	100	90.32	<input checked="" type="checkbox"/>	
Bio Chem Systems		Bio T Foam Plus	100	79.54	<input type="checkbox"/>	
Invista S.a.r.l		Flexisolv DBE 3 ester	100	65.35	<input type="checkbox"/>	
Eastern Color and Chemical Company		Ecobrite Cleaner AK	100	61.45	<input type="checkbox"/>	
Gemtek Products		SC EZ Solv Safety Solvent	100	75.41	<input type="checkbox"/>	

Conclusion: AW Chesterton was successful in removing the coating.