

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:
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 was partially successful in removing the coating. Additional contact time may improve efficiencies for others as there was signs that the coating was starting to crack.

Summary:

Substrates:	Aluminum				
Contaminants:	Coatings				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
AW Chesterton	278 Super Solv	100	52.37	<input type="checkbox"/>	Retest at longer time
Bio Chem Systems	Bio T Foam Plus	100	76.32	<input type="checkbox"/>	Retest at longer time
Invista S.a.r.l	Flexisolv DBE 3 ester	100	5.88	<input type="checkbox"/>	
Eastern Color and Chemical Company	Ecobrite Cleaner AK	100	8.48	<input type="checkbox"/>	
Gemtek Products	SC EZ Solv Safety Solvent	100	1.39	<input type="checkbox"/>	

Conclusion: No products removed over 85% of the coating.