

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.