

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004
 DateRun: 05/03/2004
 Experimenters: Dave Hout
 ClientType: Lab
 ProjectNumber: Project #1
 Substrates: Aluminum
 PartType: Coupon
 Contaminants: Resins/Rosins
 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 four products were heated to 130 F on a hot plate. Twenty-one preweighed coupons were coated with Ashland Acrylic Resin Arosset 1872 Z40 (108-88-33, 141-78-6, 142-82-5, 67-63-2) 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: | Resins/Rosins | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| US Polychem Corporation | Polychem A 2000 P | 5 | 19.54 | <input type="checkbox"/> | |
| ISP Technologies | Ship Shape Resin Cleaner | 100 | -40.96 | <input type="checkbox"/> | |
| Invista S.a.r.l | Flexisolv DBE 3 ester | 100 | 49.25 | <input type="checkbox"/> | |
| EcoLink | VG 151 | 100 | -60.87 | <input type="checkbox"/> | |
| Church & Dwight Co Inc. | Armakleen E 2001 | 5 | -21.43 | <input type="checkbox"/> | |
| US Polychem Corporation | Polychem Ultra CR | 5 | -17.55 | <input type="checkbox"/> | |
| Brulin Corporation | Formula 815 MX | 5 | -29.55 | <input type="checkbox"/> | |

Conclusion: All products were ineffective at removing the contaminants.