

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004
DateRun: 03/03/2004
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 Ferrocote 5815 LVO 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:

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|----------------------|-------------------------------|---------------|--------------------|-------------------------------------|----------------------|
| Substrates: | | Aluminum | | | |
| Contaminants: | | Coatings | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Calgon Corporation | Geo Guard 3015 | 5 | 87.63 | <input checked="" type="checkbox"/> | |
| ISP Technologies | Ship Shape Resin Cleaner | 100 | 50.43 | <input type="checkbox"/> | |
| Dow Chemical Company | XUS 40571 Development Solvent | 100 | 93.90 | <input checked="" type="checkbox"/> | |
| Dow Chemical Company | XUS 40579 Development Solvent | 100 | 94.34 | <input checked="" type="checkbox"/> | |

Conclusion: Three of the four products were effective at removing the contaminants with an efficiency rate of >87%