

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 07/06/2004

Experimenters: Heidi Wilcox

ClientType: Lab

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Oil

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.
Cleaning: 5 min. immersion cleaning at 96 F with stir-bar agitation.
NO Rinsing
Drying: 30 sec. Air blow off using hose
Contaminant:
Oil Nisseki SAS 40 CAS# 2776-01-8, 612-00-00, 103-29-7, 101-81-5
Substrate 2 " x 2" aluminum

Results:

Summary:

| Substrates: | | Aluminum | | | |
|----------------------|---------------------------------|---------------|--------------------|-------------------------------------|--|
| Contaminants: | | Oil | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Petroferm Inc | Lenium CP (no longer available) | 100 | 100.51 | <input checked="" type="checkbox"/> | |
| Petroferm Inc | Lenium ES | 100 | 102.50 | <input checked="" type="checkbox"/> | Over 102 usaulay not effective but thi is marginal and no visible damage with 5 minute trial |
| Invista S.a.r.l | Flexisolv DBE 6 ester | 100 | 102.70 | <input checked="" type="checkbox"/> | Over 102 usaulay not effective but thi is marginal and no visible damage with 5 minute trial |

Conclusion: They all were effective, again ES & GS were slightly above 102% (0.5 & 0.7) but again we believe this is due to removing films or buildup form the coupons effectively since there was no visible signs of deterioration of the coupon.