

# 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:**

<b>Substrates:</b>		Aluminum			
<b>Contaminants:</b>		Oil			
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
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 usaully 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 usaully 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.