

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2002

DateRun: 01/11/2002 Experimenters: Heidi Wilcox

ClientType: Lab

ProjectNumber: Project #1
Substrates: Aluminum
PartType: Coupon

Contaminants: Lubricating/Lapping Oils

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 with stir-bar agitation @ 120 F Rinsing: 1/2 min, manual, in 102 F water (tap)

Drying: 1 min with heat gun @ 500F

Contaminant: Cook's Ind Lubricants (Elf Lubricants North America Inc)

Cool 5

Results: Low Foam: This cleaner looked to almost bleach the coupons. It either thoroughly cleaned the coupon of

all background and newly added contaminants or it reacted with the aluminum itself.

Summary:

Substrates:	Aluminum					
Contaminants:	Lubricating/Lapping Oils					
Company Name:		Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Kleer Flo Company		Grease Off 2	5	99.23	V	
Valtech Corporation		Valtron SP 2201	5	99.64	V	
Valtech Corporation		Valtron SP 2200	5	99.98	7	
Permatex Industrial Corporation		Natural Blue	5	97.43	7	
International Products Corporation		LF 2100 (Liquid Foam Cleaner)	5	106.73		
US Polychem Corporation		Polychem PW 147	5	82.42		not effective

Conclusion:

4 of the 6 cleaners were effective. Perfect Way 147 (82.42 ave % removal). LF-2100 had an average % removal of 106.73. The coupons looked almost bleached with a line where the contaminant and cleaner

had been used.