CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2007

DateRun: 05/15/2007

Experimenters: Jason Marshall

ClientType: Metal

ProjectNumber: Project #1

Substrates: Alloys

PartType: Coupon

Contaminants: Oil

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To evaluate top alternatives on third supplied contaminant.

Experimental Procedure: Five products from the previous trial were selected and used at full strength based on past performance. The cleaning solutions were all heated to 130 F on a hot plate.

Fifteen preweighed alloy coupons were coated with the third supplied lubricant and weighed a second time to determine the amount of contaminant added to each coupon. Three coupons were immersed into each solution and cleaned for 5 minutes using stir-bar agitation. Coupons were rinsed in room temperature tap water for 15 seconds and air dried using compressed dry air for 30 seconds. A final weight was recorded, and efficiencies were calculated for each coupon cleaned.

Results: All five of the products removed over 90% of the lubricant. All but one removed over 95% and two of these removed over 97%. The table below lists the amount of soil added, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
Soy Gold 1100	0.4782	0.0441	90.78
	0.3664	0.0353	90.37
	0.4703	0.0279	94.07
Solsafe 245	0.4263	0.0187	95.61
	0.5162	0.0109	97.89
	0.5374	0.0425	92.09
Shopmaster RC	0.3993	0.0263	93.41
	0.4303	0.0141	96.72
	0.5563	0.0203	96.35
DS 108	0.3071	0.0107	96.52
	0.3295	0.0097	97.06
	0.3694	0.0078	97.89
D Greeze 500 LO	0.5063	0.0146	97.12
	0.4665	0.0085	98.18
	0.3407	0.0133	96.10

Summary:

Substrates:	Alloys
Contaminants:	Oil

Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
AG Environmental Products	Soy Gold 1100	100	91.74	☑	
Bio Chem Systems	Solsafe 245	100	95.20	☑	
Buckeye International	Shopmaster RC	100	95.50	☑	
Dysol	DS 108 Wipe Solvent	100	97.15	☑	
Transene Company, Inc.	D Greeze 500 LO	100	97.13	☑	

Conclusion: The effective products will be tested on the fourth supplied contaminant following the same laboratory procedures.