CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2008
DateRun:	04/03/2008
Experimenters:	Shweta Bansal
ClientType:	Lab
ProjectNumber:	Project #1
Substrates:	Aluminum
PartType:	Coupon
Contaminants:	Greases
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Gravimetric
Purpose:	removing grease off of aluminum surfaces using non-toxic cleaning products.
Experimental Procedure:	Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning. Products were based on the compatibility of substrate and removal of foreign substance. Used 5% concentration and heated the samples at 135F. The coupons were immersed in a product for 5 minutes, rinsed for 30 seconds in tap water at 120F and dried in 30 seconds using compressed air is room temperature. Coupons were coated with used oil. Using a handheld swab and allowed to dry for 144 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added. After cleaning process, the final weights were recorded, efficiencies were calculated and recorded.

Results:

Cleaner	Initial wt	Final wt	% Removed
resineater			
	1.4015	0.7503	46.46
	0.8815	0.5791	34.31
	1.4462	0.7192	50.27
amberclean L12			
	0.7530	0.4965	34.06
	0.9684	0.6494	32.94
	0.7440	0.5477	26.38
aquavantage 1400 GD			
	0.8336	0.8568	-2.78
	0.8924	0.8041	9.89
	0.8197	0.6754	17.60
sea wash blue			
	0.8731	0.5773	33.88
	0.7096	0.5603	21.04
	1.3015	0.9592	26.30
sc aircraft and metal cleaner			
	0.7069	0.6339	10.33
	1.0174	0.9033	11.21
	1.2859	1.1602	9.78
nab 9000			
	0.8268	0.6165	25.44
	1.1790	1.0984	6.84
	1.4364	1.2678	11.74

Summary:

Substrates:	Aluminum				
Contaminants:	Greases				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Finger Lakes Chemical	FLSC-12 Resineater Sample	5	43.68	☐	
Innovative Organics Inc	Amberclean L 12	5	31.13	☐	

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Brulin Corporation	Aquavantage 1400	5	8.24	☐	
Warren Chemical Company	Sea Wash Blue	5	27.07	☐	
Gemtek Products	SC Aircraft & Metal Cleaner Super Concentrate	5	10.44	☐	
North Atlantic Bio Industries	NAB 9000	5	14.67	☐	

Conclusion: None of the products that has tested passed the removal rate of 85%.