CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2008
DateRun:	04/02/2008
Experimenters:	Shweta Bansal
ClientType:	Lab
ProjectNumber:	Project #1
Substrates:	Aluminum
PartType:	Coupon
Contaminants:	Oil
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Gravimetric
Purpose:	Removing containiments 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
california parts washer solution			
	0.4668	0.0425	90.90
	0.8404	0.0089	98.94
	0.6322	0.0047	99.26
valtron sp 2275			
	0.9311	0.0819	91.20
	1.2387	0.0318	97.44
	0.7988	0.0760	90.49
shopmaster LPH			
	0.8495	0.0966	88.63
	0.7932	0.0876	88.96
	0.9868	0.0805	91.84
sea wash blue			
	0.8015	0.0123	98.47
	0.9927	0.0095	99.04
	0.8976	0.0212	97.64
sc aircraft and metal cleaner			
	0.9623	0.0551	94.27
	0.5892	0.0363	93.84
	0.704	0.0203	97.12
nab 9000			
	0.9941	0.0640	93.56
	0.8911	0.0672	92.46
	0.8450	0.0714	91.55

Summary:

Substrates:	Aluminum				
Contaminants:	Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Phase III Inc	California Parts Washer Solution	5	96.36	☑	
Valtech Corporation	Valtron SP 2275	5	93.04	☑	
Buckeye International	Shopmaster LPH	5	89.81	☑	

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Warren Chemical Company	Sea Wash Blue	5	98.38	☑	
Gemtek Products	SC Aircraft & Metal Cleaner Super Concentrate	5	95.08	☑	
North Atlantic Bio Industries	NAB 9000	5	93.96	☑	

Conclusion: All the products tested has passed the contaminant removal rate of 85% or better.