CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2008
DateRun:	05/20/2008
Experimenters:	Ephraim Massawe
ClientType:	Lab
ProjectNumber:	Project #1
Substrates:	Aluminum
PartType:	Coupon
Contaminants:	Lubricating/Lapping Oils
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Gravimetric
Purpose:	removing preinco #47 lube of the surface of aluminum using non-toxic cleaners.
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.

Results:

Cleaner	Initial wt	Final wt	% Removed
Nab 9000			
	0.4618	0.0618	86.62
	0.4430	0.0406	90.84
	0.4999	0.0343	93.14
ozzy juice sw1			
	0.5511	0.0294	94.67
	0.3082	0.0352	88.58
	0.3728	0.0329	91.17
valtron sp2275			
	0.3376	0.0066	98.05
	0.4096	0.0080	98.05
	0.4900	0.0169	96.55
sea wash blue			
	0.6640	0.0084	98.73
	0.7212	0.0062	99.14
	0.5934	0.0049	99.17
ozzy juice sw3			
	0.3304	0.0025	99.24
	0.4652	0.0025	99.46
	0.4105	-0.0006	100.15
california parts washer			
	0.7186	0.0409	94.31
	0.4873	0.0223	95.42
	0.4227	0.0208	95.08

Summary:

Substrates:	Aluminum				
Contaminants:	Lubricating/Lapping Oils				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
North Atlantic Bio Industries	NAB 9000	5	90.20	☑	
Chem Free Corporation	SW-1 Ozzy Juice	5	91.47	☑	
Valtech Corporation	Valtron SP 2275	5	97.55	☐	
Warren Chemical Company	Sea Wash Blue	5	99.02	☑	
Chem Free Corporation		5	99.62	☑	

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	SW-3 Ozzy Juice (Improved Low Odor)				
Phase III Inc	California Parts Washer Solution	5	94.94	☑	

Conclusion: All products tested surpassed the approval removal rate of 85%.