

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008  
 DateRun: 05/07/2008  
 Experimenters: Ephraim Massawe  
 ClientType: Lab  
 ProjectNumber: Project #1  
 Substrates: Aluminum  
 PartType: Coupon  
 Contaminants: Oil  
 Cleaning Methods: Immersion/Soak  
 Analytical Methods: Gravimetric

Purpose: Removing moxoline 75 off of the surfaces of aluminum by 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.

Results:

Cleaner	Initial wt	Final wt	% Removed
ozzy sw-3			
	0.4427	0.0221	95.01
	0.2433	0.0276	88.66
	0.3277	0.0382	88.34
sea wash blue			
	0.4979	0.0092	98.15
	0.4785	0.0165	96.55
	0.3594	0.0184	94.88
ozzy sw-1			
	0.3148	0.0576	81.70
	0.4314	0.0521	87.92
	0.3486	0.0475	86.37
nab 9000			
	0.5169	0.0864	83.28
	0.3653	0.0444	87.85
	0.4019	0.0272	93.23
california parts washer			
	0.4907	0.0051	98.96
	0.7297	0.0049	99.33
	0.4705	0.0064	98.64
valtron sp 2275			
	0.3918	0.0847	78.38
	0.3723	0.0998	73.19
	0.6877	0.0554	91.94

Summary:

<b>Substrates:</b>	Aluminum				
<b>Contaminants:</b>	Oil				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Chem Free Corporation	SW-3 Ozzy Juice (Improved Low Odor)	5	90.67	<input checked="" type="checkbox"/>	
Warren Chemical Company	Sea Wash Blue	5	96.53	<input checked="" type="checkbox"/>	
Chem Free Corporation	SW-1 Ozzy Juice	5	85.33	<input checked="" type="checkbox"/>	
North Atlantic Bio Industries	NAB 9000	5	88.12	<input checked="" type="checkbox"/>	

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Phase III Inc	California Parts Washer Solution	5	98.98	<input checked="" type="checkbox"/>	
Valtech Corporation	Valtron SP 2275	5	81.17	<input checked="" type="checkbox"/>	

Conclusion: All products in this lab surpassed the passing removal rate of 85% or higher.