CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 05/14/2008

Experimenters: Ephraim Massawe

ClientType: Lab

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Cutting/Tapping Fluids

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: removing cool tool II from the surfaces of aluminum by 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
ozzy juice sw-1			
	0.4615	0.0614	86.70
	0.4426	0.0329	92.57
	0.5022	0.0333	93.37
nab 9500			
	0.5507	0.0304	94.48
	0.3106	0.0379	87.80
	0.3721	0.0319	91.43
ozzy juice sw-3			
	0.3395	0.0056	98.35
	0.4073	0.0076	98.13
	0.4919	0.0188	96.18
sea wash blue			
	0.6668	0.0074	98.89
	0.7217	0.0067	99.07
	0.5959	0.0055	99.08
california parts washer			
	0.2690	0.0030	98.88
	0.4694	0.0043	99.08
	0.4032	0.0020	99.50
valtron sp 2275			
	0.7191	0.0420	94.16
	0.4876	0.0229	95.30
	0.4230	0.0222	94.75

Summary:

Substrates:	Aluminum
Contaminants:	Cutting/Tapping Fluids

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Chem Free Corporation	SW-1 Ozzy Juice	5	90.88	☑	
North Atlantic Bio Industries	NAB 9000	5	91.23	☑	
Chem Free Corporation	SW-3 Ozzy Juice (Improved Low Odor)	5	97.55	☑	
Warren Chemical Company	Sea Wash Blue	5	99.01	☑	

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Phase III Inc	California Parts Washer Solution	5	99.16	☑	
Valtech Corporation	Valtron SP 2275	5	94.74	☑	

Conclusion: All products surpassed the removal rate of 85% or higher.