CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2009
DateRun:	02/24/2009
Experimenters:	Daniel Pina
ClientType:	Lab
ProjectNumber:	Project #1
Substrates:	Steel
PartType:	Coupon
Contaminants:	Cutting/Tapping Fluids
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	Using non-toxic aqueous cleaning products to remove cutting/tapping fluid off of steel using a manuel wipe method.
Experimental Procedure:	Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning. Weigh the steel coupons to get an original weight before adding the cutting/tapping fluid. The weigh the dirty coupons get a second reading. Setup the manual wipe machine for 20 cycles = 30 seconds and add the cleaning solution to the coupons that is designated to be tested with this cleaning product. After that reweigh the coupons to get a final reading and see what percentage of the tapping/cutting fluid has been taken off.

Results:

Cleaner	Initial wt	Final wt	% Removed
Brulin Corp. - Aquavantage			
	0.0500	-0.0010	102.00
	0.1000	-0.0063	106.30
	0.0760	-0.0070	109.21
Ecolink Pinnacle			
	0.1760	-0.0012	100.68
	0.1569	-0.0069	104.40
	0.1607	-0.0016	101.00
Innovative Organics inc - Amber Clean			
	0.1387	-0.0014	101.01
	0.1016	-0.0019	101.87
	0.2642	-0.0085	103.22
Magnaflux - Daraclean 238			
	0.0972	-0.0072	107.41
	0.1094	-0.0061	105.58
	0.1389	-0.0057	104.10
Magnaflux - Daraclean 236			
	0.2343	-0.0062	102.65
	0.2924	-0.0021	100.72
	0.1436	-0.0021	101.46
US PolyChem Corp. - Polyspray jet 790 xs			
	0.1713	-0.0052	103.04
	0.1834	-0.0067	103.65
	0.2302	-0.0070	103.04
Warren Chemical company - Sea Wash Blue			
	0.1591	-0.0027	101.70
	0.1930	0.0031	98.39

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	0.2074	-0.0119	105.74

Summary:

Substrates:	Steel
Contaminants:	Cutting/Tapping Fluids

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Brulin Corporation	Aquavantage 1400	10	105.84	☐	above 103 possible need to over look product to see if product does indeed coroded the sample or if it has taken off the soil that was on the sample originally before being soiled by the cutting/tapping fluid.
EcoLink	Pinnacle	10	102.03	☑	
Innovative Organics Inc	Amberclean SC 11	10	102.03	☑	
Magnaflux	Daraclean 238	10	105.70	☑	above 103 possible need to over look product to see if product does indeed coroded the sample or if it has taken off the soil that was on the sample originally before being soiled by the cutting/tapping fluid.
Magnaflux	Daraclean 236	10	101.61	☑	
US Polychem Corporation	Polyspray Jet 790 XS	10	103.24	☑	
Warren Chemical Company	Sea Wash Blue	10	101.94	☑	

Conclusion:

All of the product passed the test with average cleaning average of 100+%. They are two products that need to have a second look to see if the product does damage to the product or not. They are Aquavantage 1400 and Daraclean 238.