CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2009

DateRun: 03/03/2009

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 manual 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
AG Environmental Soygold 1000	0.1584	-0.0003	100.19
	0.283	0.0028	99.01
	0.1852	0.0006	99.68
AG Environmental Soygold 1100	0.3161	0.0012	99.62
	0.2767	0.0029	98.95
	0.3388	0.0015	99.56
AG Environmental Soygold 2000	0.3123	0.0057	98.17
	0.3289	0.0089	97.29
	0.3347	0.003	99.1
BioGenesis Enterprises BG Clean 648	0.4239	0.0063	98.51
	0.3732	0.0061	98.37
	0.2405	0.0053	97.8
Bi-O-Clean Industry Soy Cream Cleaner	0.3009	0.0057	98.11
	0.499	0.0031	99.38
	0.3753	0.0047	98.75
Franmer Chemical Bean-e-doo	0.3032	0.0089	97.06
	0.3841	0.0074	98.07
	0.4406	0.0045	98.98
Franmar Chemical Emerge	0.3403	0.0078	97.71
	0.2947	0.0101	96.57
	0.2461	0.0074	96.99
Franmer Chemical Soy Gel	0.0444	0.0058	86.94
	0.266	0.0014	99.47
	0.3776	0.0079	97.91
Gemtek Products Ez Solv	0.4238	0.0043	98.99
	0.4342	0.0063	98.55
	0.3804	0.0071	98.13
Gemtek Products SC Oven & Grill Cleaner	0.432	0.0062	98.56
	0.2893	0.0005	99.83
	0.4031	0.0028	99.31

Summary:

Substrates:	Steel
Contaminants:	Cutting/Tapping Fluids

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Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
AG Environmental Products	Soy Gold 1000	10	99.63	☑	
AG Environmental Products	Soy Gold 1100	10	99.38	☑	
AG Environmental Products	Soy Gold 2000	10	98.19	☑	
BioGenesis Enterprises Inc	BG Clean 648	10	98.23	☑	
Bi-O-Kleen Industries	Soy Cream Cleaner	17	98.74	☑	
Franmar Chemical	Bean-e-doo (Parts Washer Solvent)	10	98.04	☑	
Franmar Chemical	Emerge super infusion surfactant (one gallon NVC)	10	97.09	☑	
Franmar Chemical	Soy Gel Paint Stripper	10	94.77	☑	
Gemtek Products	SC EZ Solv Safety Solvent	10	98.56	☑	
Gemtek Products	Safe Care (SC) Oven & Grill Cleaner	10	99.23	☑	

Conclusion: All the products passed the acceptable cleaning rate of 85%. Each product shows that it is a great contender for cleaning cutting/tapping fluid off of steel.