CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2009
DateRun:	03/16/2009
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-toxicbiobased 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. Weight 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
Orison Marketing VPW SC 1000			
	0.0798	0.0028	96.49
	0.1703	0.0005	99.71
	0.2608	0.0003	99.89
Soly Solv ind. Cornsolv			
	0.3243	0.0014	99.57
	0.2309	0.0008	99.65
	0.4084	0.0024	99.41
Soly Solv ind. Soysolv II			
	0.2868	0.0060	97.91
	0.2961	0.0046	98.45
	0.1905	0.0052	97.27
Spartan Chemical company graffiti remover SAC			
	0.2976	0.0033	98.89
	0.1763	0.0028	98.41
	0.3393	0.0026	99.23
Spartan Chemical Company soy strong			
	0.2537	0.0055	97.83
	0.3062	0.0055	98.20
	0.3220	0.0087	97.30
Tarksol inc. Tarksol npb			
	0.2603	0.0070	97.31
	0.3032	0.0096	96.83
	0.3161	0.0098	96.90
United Laboratories smart solve 605			
	0.3140	0.0066	97.90
	0.3762	0.0068	98.19
	0.3503	0.0069	98.03
Vertec biosolv vertec bio gold 3			
	0.3233	0.0055	98.30
	0.3227	0.0051	98.42
	0.3308	0.0103	96.89

Summary:

Substrates:	Steel

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Contaminants:	Cutting/Tapping Fluids				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Orison Marketing	VPW SC 1000	10	98.69	☑	
Soysolv Industrial Products	Cornsolv industrial solvent	10	99.54	☑	
Soysolv Industrial Products	Soysolv II solvent	10	97.87	☑	
Twin Rivers Technologies	Graffiti Remover	10	98.85	☑	
Spartan Chemical Company	Soy Strong	10	97.78	☑	
Tarksol Inc	Tarksol NPB	10	97.01	☑	
United Laboratories International	Smart Solve 605	10	98.04	☑	
Vertec BioSolvents	VertecBio Gold 3	10	97.87	☑	

Conclusion: All eight products removed more than 85% of the cutting fluid from steel using manual wiping