

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

Summary: 

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

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