CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2009

DateRun: 02/08/2009

Experimenters: Johanna Oviedo

ClientType: Lab

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Inks

Cleaning Methods: Immersion/Soak

Analytical Methods: Visual

Purpose: To test nontoxic industrial cleaning solutions for oil removal

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning.

Products were selected based on the compatibility of substrate and removal of foreign substance. Used 10% concentration and heated the samples at 135F. The steel coupons were immersed in a product for 5 minutes, rinsed for 30 seconds in tap water at 120F and dried in 30 seconds using compressed air is room temperature. Coupons were coated with used oil. Using a handheld swab and allowed to dry for 144 minutes at room temperature. The contaminated coupons were weighed again to determine the amount of soil added. After cleaning process, the final weights were recorded, efficiencies were calculated and recorded.

Results:

Cleaner	Initial wt	Final wt	% Removed
Spartan Chemical Corp. Graffiti Re mover			
	0.0186	0.0064	65.59
	0.0096	0.0075	21.87
	0.0189	0.0026	86.24
DFC 105			
	0.0449	0.0021	95.32
	0.0222	0.0046	79.28
	0.0172	0.0049	71.51
Brulin Comp, Formula 815 MX-AA			
	0.1100	0.0023	97.91
	0.0542	0.0410	24.35
	0.0153	0.0145	5.23
PolyChem, Polyspray 790			
	0.0210	0.0176	16.19
	0.0286	0.0183	36.01
	0.0900	0.0834	7.33

Summary:

Substrates:	Stainless Steel				
Contaminants:	Inks				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Spartan Chemical Company	Graffiti Remover SAC	10	57.90	☐	
Cogent Environmental Solutions	DFC 105	10	82.04	☐	
Brulin Corporation	Formula 815MX AA	10	42.50	☐	
US Polychem Corporation	Polyspray Jet 790 XS	10	16.14	☐	

Conclusion: DFC 105 was the most effective of the products tested.