

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2009  
 DateRun: 02/24/2009  
 Experimenters: Johanna Oviedo  
 ClientType: Lab  
 ProjectNumber: Project #1  
 Substrates: Steel  
 PartType: Coupon  
 Contaminants: Hucker's Soil  
 Cleaning Methods: Immersion/Soak  
 Analytical Methods: Gravimetric

Purpose: To remove Hucker's soil (all purpose cleaning) from painted steel using immersion cleaning

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 for removal of the contaminant. Ten percent concentrations were used and heated the samples at 130F. The coupons were immersed in a product for 5 minutes, rinsed in tap water at 120 F and dried using compressed air at room temperature. Coupons were coated with the Hucker's soil contaminant using a handheld swab and allowed to dry for 120 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.

Cleaner	Initial wt	Final wt	% Removed
Cleaner #10			
	0.0209	0.0158	24.40
	0.1034	0.0026	97.49
	0.2918	0.0233	92.02
Green Works All Purpose			
	0.1683	0.1139	32.32
	0.2419	0.0601	75.16
	0.5470	0.0798	85.41
Heavy Duty Cleaner			
	0.1755	0.0774	55.90
	0.2389	0.1343	43.78
	0.6420	0.0787	87.74
Clorox Kitchen Cleaner			
	1.3539	0.2164	84.02
	1.0039	0.3199	68.13
	0.5789	0.0499	91.38

Substrates:		Steel			
Contaminants:		Hucker's Soil			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Sky Products Company Inc	Cleaner #10	10	71.30	<input type="checkbox"/>	
Clorox Company	Green Works Multi-Surface Cleaner	10	64.32	<input type="checkbox"/>	
Scout Systems	Scout Heavy Duty	10	62.47	<input type="checkbox"/>	
Clorox Company	Clorox Kitchen Cleaner	10	81.18	<input type="checkbox"/>	

Conclusion: No product removed over 85% of the Hucker's soil using immersion cleaning.