

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016
 DateRun: 11/16/2016
 Experimenters: Francisco Abreau, Vinh Tran, James Keats
 ClientType:
 ProjectNumber: Project #1
 Substrates: Aluminum, Stainless Steel
 PartType: Coupon
 Contaminants: Lubricating/Lapping Oils, Dirt
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric

Purpose: To evaluate the effectiveness of the supplied cleaners with bike soil removal on provided substrates.

Experimental Procedure: Fifteen stainless steel coupons and fifteen aluminum coupons were weighed to attain initial weights. Bike soil was prepared using 1.6 grams of bike soil and 50 drops of Tri-flow lubricant. Each coupon was then soiled with 1.6 grams of bike soil and 50 drops of Tri-flow lubricant. Dirty weights were recorded. Three coupons were placed in the manual SLW machine at a time and sprayed twice each with the selected cleaner, as well as the paper towel. The coupons were then run for a total of 5 cycles. The process was repeated for all of the 30 coupons. After the cleaning process the coupons were allowed to dry. Subsequently, the dried coupons were weighed to attain final weights.

Results:		Initial wt.	Final wt	% Removed	Average %
	Pro-Gold Degreaser	0.1719	0.0099	94.24	93.57
		0.2574	0.0209	91.88	
		0.2475	0.0134	94.59	
	Pedro's Oranj Peelz	0.2628	0.0070	97.34	95.34
		0.3059	0.0167	94.54	
		0.2986	0.0175	94.14	
	Pedro's Degreaser 13	0.3862	0.0182	95.29	94.17
		0.3260	0.0413	87.33	
		0.2809	0.0003	99.89	
	Pedro's Green Fizz	0.5200	0.0236	95.46	96.38
		0.4137	0.0138	96.66	
		0.2818	0.0084	97.02	
	Clean Streak White Lightning	0.3676	0.0311	91.54	95.2
		0.5533	0.0203	96.33	
		0.3292	0.0075	97.72	

Summary:	Substrates: Aluminum, Stainless Steel				
	Contaminants: Lubricating/Lapping Oils, Dirt				
	Company Name:	Product Name:	Conc.:	Efficiency:	Effective:
	Abc Compounding	Pro-gold Degreaser	100	93.57	<input checked="" type="checkbox"/>
	Pedro's	Oranj Peelz	100	95.34	<input checked="" type="checkbox"/>
	Pedro's	Degreaser 13	100	94.17	<input checked="" type="checkbox"/>
	Pedro's	Green Fizz	100	96.38	<input checked="" type="checkbox"/>
	White Lightning	Clean Streak (Aerosol)	100	95.20	<input checked="" type="checkbox"/>

Conclusion: Overall, all five of the cleaners were very effective at removing the bike soil from both stainless steel and aluminum. All of the cleaners had an average removal of above 93%, well above the optimal percentage removal of 85%.