

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016
 DateRun: 10/26/2016
 Experimenters: Alicia McCarthy, Sabrina Apel, James Keats
 ClientType:
 ProjectNumber: Project #1
 Substrates: Steel
 PartType: Coupon
 Contaminants: Greases, Dirt
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric
 Purpose: Evaluate Troy Corp cleaners for bike soil removal

Experimental Procedure: Initial weights of the coupons were recorded. The bike soil was applied to each of the coupons. Dirty weights were recorded and they were placed in threes into the Manual SLW machine. The coupons and paper towel were both sprayed twice with the selected cleaner. 5 complete back and forth cycles were run and the coupons were then allowed to dry. Once dry, the clean weights were recorded. This process was repeated for each cleaner. Comparative products were picked based off the cleaners used by a local bike shop.

Results:

Cleaner	Initial wt	Final wt.	% Removed	Average %
Tetra T08867	2.3976	0.0165	99.31	99.25
	2.5280	0.0175	99.31	
	2.3514	0.0204	99.13	
Tetra T08868	2.3342	0.0689	97.05	96.70
	2.3202	0.0775	96.66	
	2.4397	0.0883	96.38	
Tetra T08869	2.4183	0.0576	97.62	97.46
	2.4944	0.0522	97.91	
	2.4112	0.0760	96.85	
Tetra T08870	2.3911	0.0767	96.79	96.59
	2.4295	0.0738	96.96	
	2.3840	0.0948	96.02	
Tetra T08871	1.8985	0.0227	98.80	97.98
	2.0312	0.0399	98.04	
	2.0251	0.0586	97.11	
Water	2.3971	0.0695	97.10	97.92
	2.3785	0.0284	98.81	
	2.3478	0.0504	97.85	
Simple Clean	2.0251	0.0249	98.77	98.59
	2.0399	0.0199	99.02	
	2.0409	0.0415	97.97	
Super Bike Wash	1.9874	0.0966	95.14	96.00
	2.1589	0.1372	93.64	
	2.0187	0.0156	99.23	
WD-40 Foaming Bike Wash	2.2738	0.0539	97.63	97.55
	2.3063	0.0407	98.24	
	2.2295	0.0715	96.79	
Goo Gone	2.0812	0.1457	93.00	93.68

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	2.2908	0.1035	95.48	
	2.3270	0.1729	92.57	

Summary:

Substrates:	Steel				
Contaminants:	Greases, Dirt				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Troy Corporation	Tetra T08867	100	99.25	<input checked="" type="checkbox"/>	
Troy Corporation	Tetra T08868	100	96.70	<input checked="" type="checkbox"/>	
Troy Corporation	Tetra T08869	100	97.46	<input checked="" type="checkbox"/>	
Troy Corporation	Tetra T08870	100	96.59	<input checked="" type="checkbox"/>	
Troy Corporation	Tetra T08871	100	97.98	<input checked="" type="checkbox"/>	
Water	Water	100	97.92	<input checked="" type="checkbox"/>	
Simple Green	Crystal Simple Green Industrial Cleaner & Degreaser	100	98.59	<input checked="" type="checkbox"/>	
Fisher Scientific	Absolute Ethanol	0	0.00	<input type="checkbox"/>	
Finish Line Technologies Inc	Super Bike Wash Concentrate	100	96.00	<input checked="" type="checkbox"/>	
WD 40 Company	WD 40 Foaming Bike Wash	100	97.55	<input checked="" type="checkbox"/>	
Goo Gone	Goo Gone Original	100	93.68	<input checked="" type="checkbox"/>	

Conclusion:

All the cleaners were gravimetrically effective. There was still significant residual contaminant on all cleaners besides those tested with Simple Clean and Tetra T08867.