

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2023

DateRun: 02/21/2023

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ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: DCC-17

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric, Visual

Purpose: To evaluate the efficacy of sludge removal (DCC-17) on a hard surface over a span of 10 days.

Experimental Procedure: Initial weights of fifteen coupons, three per flask, will be recorded before applying 0.25g of DCC-17 to each coupon using a sterile swab. Contaminated weights will be recorded 24 hours after air drying at room temperature. Coupons will be immersed in the solution, either a product/ autoclaved minimal media or a control of deionized (DI) water/ autoclaved minimal media mixture, and incubated at 30°C and shaken (200rpm) for 10 days before final weights and observations are taken.

Protocol for 1L of Minimal Media:

- 7.50 g Bacto peptone media
- 3.27g Bushnell Hass Broth
- 1 Liter DI Water

Results: Coupons in the control flask had similar gravimetric and visual removal as the client and comparative products most likely due to the addition of agitation.

Cleaner	Final wt. of cont.	%Cont Removed	% AVG
Instant Power RV and Marine Holding Tank Treatment	0.0012	99.52	99.63
	0.0007	99.73	
	0.0009	99.65	
Roebic RV and Marine Holding Tank Treatment	0.0031	98.79	99.05
	0.0010	99.62	
	0.0031	98.73	
Instant Power Septic Shock	0.0042	98.33	98.89
	0.0022	99.14	
	0.0020	99.21	
Roebic Septic System Cleaner	0.0004	99.84	99.65
	0.0006	99.76	
	0.0017	99.33	
DI Water	0.0018	99.30	99.15
	0.0025	99.00	
	0.0022	99.14	

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Summary:

Substrates:		Stainless Steel			
Contaminants:		DCC-17			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Instant Power	RV & Marine Tank Treatment	6.25ml /500ml minimal media	99.63	☒	
ROEBIC Laboratories, Inc.	RV and Marine Holding Tank Treatment	6.25ml /500ml minimal media	99.05	☒	
Instant Power	Septic Shock	6.25ml /500ml minimal media	98.98	☒	
ROEBIC Laboratories, Inc.	K-37 Septic Tank Treatment	6.25ml /500ml minimal media	99.65	☒	

Conclusion:

The Instant Power RV and Marine Holding Tank Treatment and Septic Shock were as effective as the competitor products at removing sludge from stainless steel.