

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2025

DateRun: 03/26/2025

Experimenters: Rachael Rososky, Alex Joga

ClientType:

ProjectNumber: Project #7

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Blood

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To test the efficacy of Biogone concentration: 0.25 oz/gal in removing synthetic blood from stainless steel at various temperatures

Experimental Procedure: Biogone at a concentration of 0.25oz/gal was tested at three temperatures: 25C, 50C, and 60C. Three stainless steel coupons were chosen for each temperature tested for a total of nine coupons. Each coupon was weighed and had their initial weights recorded. The coupons were then soiled with the provided synthetic blood by using a disposable pipette and swab to wipe the blood on the lower third of each coupon (where the coupon would come in contact with the cleaning agent during immersion). The coupons were left to air dry for 24 hours before having their dirty weights recorded. The coupons were then subjected to 3 minutes of immersion in the Biogone 0.25oz/gal at their respective temperatures with a stir bar set to 200 rpm. After cleaning, each coupon was rinsed in a DI water bath for 1 minute with a stir bar set to 200 rpm. The coupons were left to air dry for 5 days before having their clean weights recorded.

Results:

Product	Coupon	Initial wt	Dirty wt	Clean wt.	Initial wt of cont.	Final wt of cont.	%Cont Removed	%AVG
Biogone 25°C (0.25oz/gal)	19	60.3358	60.3409	60.3386	0.0051	0.0028	45.10	48.58
	25	49.5633	49.5674	49.5654	0.0041	0.0021	48.78	
	32	49.5053	49.5134	49.5092	0.0081	0.0039	51.85	
Biogone 50°C (0.25oz/gal)	2	49.4279	49.4343	49.4292	0.0064	0.0013	79.69	76.07
	20	49.3835	49.3900	49.3852	0.0065	0.0017	73.85	
	18	49.4579	49.4654	49.4598	0.0075	0.0019	74.67	
Biogone 60°C (0.25oz/gal)	28	60.0881	60.0926	60.0892	0.0045	0.0011	75.56	78.70
	7	58.9648	58.9701	58.9658	0.0053	0.0010	81.13	
	1	49.2973	49.3075	49.2994	0.0102	0.0021	79.41	

Summary:

Substrates:		Stainless Steel				
Contaminants:		Blood				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:	
Case Medical Inc.	BioGone Cleaner/Decontaminator	0.25oz/gal	48.58	☐		
Case Medical Inc.	BioGone Cleaner/Decontaminator	0.25oz/gal	76.07	☐		
Case Medical Inc.	BioGone Cleaner/Decontaminator	0.25oz/gal	78.70	☐		

Conclusion:

As the temperature increases, the performance of the Biogone 0.25oz/gal improves. Cleaning at all three temperatures were not able to consistently remove staining.