

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2017
 DateRun: 10/25/2017
 Experimenters: Dan Aspach, Kevin Smith
 ClientType:
 ProjectNumber: Project #1
 Substrates: Stainless Steel
 PartType: Coupon
 Contaminants: Blood
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Gravimetric, Visual
 Purpose: To evaluate effectiveness of the provided cleaners in regards to removing synthetic blood from stainless steel.

Experimental Procedure: Fifteen pre-weighed stainless-steel coupons were soiled with synthetic blood using a swab and allowed to air dry for 24 hours before recording dirty weights. Five cleaners were prepared using the specified dilutions and temperature: Super Nova.1 NpHD (0.8ml/1L at 160F), Biogone (33% dilution at room temperature 68 F), Pentazyme (0.5 oz/gal at 140 F), and PentaPrep Spray (RTU at 140 F). Three coupons per cleaner were immersed in a beaker for two minutes except for Biogone, which had a three-minute contact time. Coupons were rinsed in a DI water bath and dried for 24 hours before recording clean weights.

Results:

Cleaner	Initial Wt. of Cont.	Final Wt. of Cont.	%Removal	Average % Removal
SuperNova.1 NpHD	0.0202	0.0028	86.14	88.80
	0.0151	0.0014	90.73	
	0.0191	0.0020	89.53	
PentaPrep Spray	0.0231	0.0013	94.37	91.27
	0.0196	0.0005	97.45	
	0.0211	0.0038	81.99	
Biogone	0.0184	0.0043	76.63	75.81
	0.0148	0.0036	75.68	
	0.0213	0.0053	75.12	
Pentazyme	0.0157	0.0040	74.5	73.09
	0.0195	0.0052	73.3	
	0.0175	0.0050	71.4	
SuperNova .1	0.0085	0.0020	76.5	76.85
	0.0116	0.0025	78.4	
	0.0160	0.0039	75.6	

Summary:

Substrates:	Stainless Steel				
Contaminants:	Blood				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Case Medical Inc.	SuperNova .1 NpHD Neutral Detergent-CSNB01G	0.8 ml/L	88.80	<input checked="" type="checkbox"/>	
Case Medical Inc.	PentaPrep Multi-Enzymatic Pre-Soak-CSA012	100%	91.27	<input checked="" type="checkbox"/>	

Conclusion: The PentaPrep Spray and Super Nova. 1 NpHD were the only two products effective at removing synthetic blood off stainless steel.