

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2023

DateRun: 08/02/2023

Experimenters: Amelia Wagner

ClientType:

ProjectNumber: Project #6

Substrates: Aluminum, Glass/Quartz, Plastic, Stainless Steel

PartType: Coupon

Contaminants: Adhesive

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: Efficacy testing of Case Medical cleaner against SC Actisolv Safety Solvent at removing autoclave tape adhesive residue from aluminum, plastic, glass, and stainless steel

Experimental Procedure: Twelve coupons per cleaner, three of each substrate (aluminum, plastic, glass, stainless steel), had initial weights recorded before soiling. Each coupon then had a piece of autoclave tape placed on them. Each coupon with autoclave tape were then placed in an oven for 30 minutes at 250F to mimic the conditions of an autoclave. The tape was removed from each coupon with adhesive residue left behind as the soil. Dirty weights were then recorded. Each coupon was individually placed onto the Gardner-scrub Abrasion Tester machine (SLW). Microfiber towels were attached to the cleaning block used for the test. Each Wypall cloth and all coupons received three sprays of the cleaner (Three sprays=2.5ml), and the Gardner-scrub Abrasion Tester was run for 20 cycles (Equivalent to 30 seconds of cleaning). After air drying for 24 hours, final weights were taken.

Results: Barely any visual difference in any of the coupons

Cleaner	Soil	Substrate	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG	% Overall
Case Medical Ink Remover 100%	Autoclave Tape Adhesive Residue	Aluminum	0.0029	0.0020	31.03	35.34	10.25
			0.0004	0.0003	25.00		
			0.0012	0.0006	50.00		
		Glass	0.0039	0.0024	38.46	23.93	
			0.0009	0.0006	33.33		
			0.0043	0.0043	0.00		
		Plastic	0.0017	0.0017	0.00	0.00	
			0.0007	0.0007	0.00		
			0.0078	0.0078	0.00		
		Stainless Steel	0.0048	0.0040	16.67	20.50	
			0.0158	0.0114	27.85		
			0.0100	0.0083	17.00		
SC Actisolv Safety Solvent 100%		Aluminum	0.0040	0.0040	0.00	11.46	2.87
			0.0027	0.0019	29.63		
			0.0042	0.0040	4.76		
		Glass	0.0070	0.0070	0.00	0.00	
			0.0052	0.0052	0.00		
			0.0037	0.0037	0.00		
		Plastic	0.0011	0.0011	0.00	0.00	
			0.0078	0.0078	0.00		
			0.0038	0.0038	0.00		
		Stainless Steel	0.0081	0.0081	0.00	0.00	
			0.0089	0.0089	0.00		
			0.0059	0.0059	0.00		

Summary:

Conclusion: Neither the Case Medical Ink remover or the comparative product are effective in removing autoclave tape adhesive residue from any coupons, however the Case Medical Ink Remover performed slightly better than the comparative product.