

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1996  
 DateRun: 03/03/1996  
 Experimenters: Jay Jankauskas, Sutherland Ramesh  
 ClientType: Coatings Manufacturer  
 ProjectNumber: Project #1  
 Substrates: Stainless Steel  
 PartType: Coupon  
 Contaminants: Adhesive, Coatings  
 Cleaning Methods: Immersion/Soak  
 Analytical Methods: Peel test

Purpose: To determine the most effective aqueous cleaner

Experimental Procedure: The purpose of this trial is to determine the most effective aqueous chemistry in removing the basecoat #51144 coating for Coatings Manufacturer. Seven chemistries will be tested at identical cleaning conditions (160F for 30 minutes with stir-bar agitation). The concentration of chemistry used will start out at 50% and decrease by increments of 10 %. Cleanliness will be determined by a peel test. If an aqueous chemistry is effective, the urethane should easily be peeled off of coupon after cleaning.  
 SUBSTRATE MATERIAL: 304 Stainless Steel Coupons  
 CONTAMINANTS: Durane Base Coatings #51144  
 CONTAMINATING PROCESS USED: Rubbed on with swab and allowed to cure overnight

Conc.	Aluminex 5761	Aluminex 5834	Aquaclean 4874	Polyspray P	69MC	Polyspray XS	Polyspray C
50%	X	X	*	X	X	X	
40%			*	X	X		
30%					X		
20%					X		
10%							

\*The Aquaclean works on a dissolving mechanism (due to high glycol ether content) performed a 100% removal.

X-indicates that the Basecoat #51144 was able to be peeled off of the coupon after cleaning

Summary:

<b>Substrates:</b>		Stainless Steel				
<b>Contaminants:</b>		Adhesive, Coatings				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>	
US Polychem Corporation	Polyspray Jet 790 C	50	0.00	<input type="checkbox"/>	10, 20, 30, 40	
US Polychem Corporation	Polyspray Jet 790 P	50	0.00	<input type="checkbox"/>	10, 20, 30, 40	
US Polychem Corporation	Polyspray Jet 790 XS	50	0.00	<input type="checkbox"/>	10, 20, 30, 40	
US Polychem Corporation	Product 69 MC	50	0.00	<input checked="" type="checkbox"/>	10, 20, 30, 40	
General Chemical Corporation	Aluminex 5834	50	0.00	<input type="checkbox"/>	10, 20, 30, 40	
General Chemical Corporation	Aquaclean 4784	50	0.00	<input type="checkbox"/>	10, 20, 30, 40	
General Chemical Corporation	Aluminex 5761	50	0.00	<input type="checkbox"/>	10, 20, 30, 40	

Conclusion: U.S. Polychem's 69MC outperformed all other aqueous cleaners tested to date.