

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1996
DateRun: 05/08/1996
Experimenters: Jay Jankauskas
ClientType: Manufacturer of Furniture
ProjectNumber: Project #1
Substrates: Steel
PartType: Part
Contaminants: Coatings, Resins/Rosins
Cleaning Methods: Immersion/Soak
Analytical Methods: Visual
Purpose: To determine a cleaning method

Experimental Procedure: The purpose of this trial is to determine a cleaning method that would be appropriate for Moduform. For the first part of the trial, a contaminated hook was brought to AA Environmental in Woburn MA. to determine the effectiveness of Sodium Bicarbonate blasting. This process proved to be very effective. All of the built-up coatings were removed from the hook in about 30 seconds. The next test was to see if there was a drop-in chemical substitute for Methylene Chloride that would be just as effective. The coated end of eight different hooks were immersed in 500 ml concentrated solutions of eight different chemicals.
SUBSTRATE MATERIAL: Steel Hooks
CONTAMINANTS: Coatings/Urethanes
CONTAMINATING PROCESS USED: As received from Manufacturer of Furniture.

Results: The only chemistries that showed potential was the CSA Biosafe and the General Chemical Aquaclean 5784. Both of these chemistries pulled off two to three layers of coatings but did not perform as well as necessary.

Summary:

Substrates:	Steel				
Contaminants:	Coatings, Resins/Rosins				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Armex Cleaning and Coating Removal Systems	Sodium Bicarbonate	100		<input checked="" type="checkbox"/>	
Transene Company, Inc.	D Greeze 500 LO	100		<input type="checkbox"/>	
US Polychem Corporation	Polychem PW 147	100		<input type="checkbox"/>	
Tarksol Inc	Tarksol HTF 85 B	100		<input type="checkbox"/>	
AW Chesterton	803 Industrial & Marine Solvent II	100		<input type="checkbox"/>	
Brulin Corporation	Compliance	100		<input type="checkbox"/>	
CSA Inc	Bio Safe 1023	100		<input type="checkbox"/>	
General Chemical Corporation	Aquaclean 4784	100		<input type="checkbox"/>	
Tarksol Inc	SR 225	100		<input type="checkbox"/>	

Conclusion: For this cleaning application, it does not seem that a non-regulated solvent will be effective alternative for Manufacturer of Furniture's current cleaning procedure. On the other side the sodium bicarbonate blasting service by AA Environmental is definitely effective.