

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2002

DateRun: 10/16/2002

Experimenters: Heidi Wilcox

ClientType: Lab

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Adhesive

Cleaning Methods: Ultrasonics

Analytical Methods: Gravimetric

Purpose: Laboratory evaluations of alternative cleaning products

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning.
 Degassing: Degassing the solution by keeping solutions in ultrasonic crest for 5 min at 120 F.
 Cleaning: Ultrasonic for 5 min. at 120 F.
 Rinsing: NONE
 Drying: wiping with paper towels, 10 passes to remove adhesive
 Contaminant: Aroset PS 8078, Ashlan Chemical (Lot# 071901). Very thick adhesive
 CAS#'s 141-78-6 Ethyl Acetate, 142-82-5 Heptane, 67-63-0 Isopropanol

Results:

Summary:

Substrates:		Aluminum			
Contaminants:		Adhesive			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
AG Environmental Products	Soy Gold 1100	100	99.41	<input checked="" type="checkbox"/>	Sticky after ultrasonics. Removal due to wiping, 10 times with paper towel.
Phase III Inc	Biodegradable Paint & Adhesive Remover	100	28.09	<input type="checkbox"/>	
EcoLink	Rip Tide	10	99.57	<input checked="" type="checkbox"/>	Adhesive had mushy texture. Very easy to remove by wiping. 5 wipes to remove adhesive.
Pentone Corporation	Citrikleen XPC	100	99.66	<input checked="" type="checkbox"/>	very easy removal with wipe/ scrape
Metabolix Inc	Metabolix E3HB	100	37.32	<input type="checkbox"/>	
Vertec BioSolvents	VertecBio Gold Unscented Part Cleaner	100	81.41	<input type="checkbox"/>	More wipes or scraping would have removed more

Conclusion: This is a very tough adhesive. Four of the cleaners were successful in working on the adhesive and loosening or softening it making removal by wiping or scraping a possibility. This adhesive does not respond well to low flow water rinsing and air drying or blow off.