

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2001
 DateRun: 04/11/2001
 Experimenters: Todd MacFadden
 ClientType: Adhesive Manufacturer
 ProjectNumber: Project #1
 Substrates: Stainless Steel
 PartType: Coupon
 Contaminants: Adhesive
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric, Timing
 Purpose: To identify a suitable, non- or less-toxic substitute cleaner for toluene and toluene-based solvents for this industry sector.

Experimental Procedure: In an effort to obtain consistent results, this experiment is a re-test of Trial 5. The test is identical to Trial 5, with a notable modification: following the abrasion testing, and final coupon weighing, the coupons were hand-wiped clean using the corresponding cleaner that was used in the abrasion test. Hand-wiping was timed to obtain a quantitative means of analysis.

SUBSTRATE MATERIAL: SS (202-410 B85) and SS (302-B86)

CONTAMINANTS:

- a. AC-059 adhesive (108-883),
- b. Morton 717 adhesive (108-883, 108-05-4, 110-54-3, 142-82-5, 67-63-0)

Results: There were very few consistent findings in this experiment. For instance, the Dynamold DS 104 cleaner performed almost identically on both adhesives, about 65%. But acted very differently on each substrate during the hand wipe test. It took less than one minute to clean one adhesive but took over 3 minutes for the other adhesive.

Summary:

Substrates:		Stainless Steel			
Contaminants:		Adhesive			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Dysol	DS 104 Wipe Solvent	100	67.00	<input checked="" type="checkbox"/>	
Savogran Company	SI #4 Coating Remover	100	15.93	<input type="checkbox"/>	
Transene Company, Inc.	D Greeze 500 LO	100	11.62	<input type="checkbox"/>	
Today & Beyond	Beyond 2009	100	33.96	<input type="checkbox"/>	
Bio Chem Systems	Bio T Max	100	87.68	<input checked="" type="checkbox"/>	

Conclusion: It is important to note the poor performance of D-Greeze on Solutial, where as it cleaned 20% in trial 6. Toluene worked the best.