

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004
 DateRun: 05/27/2004
 Experimenters: Jason Marshall
 ClientType: Lab
 ProjectNumber: Project #1
 Substrates: Steel
 PartType: Coupon
 Contaminants: Paints
 Cleaning Methods: Vapor Degreasing
 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. Two hundred fifty milliliters of each product were used at full strength in a 4000 ml beaker and heated to its boiling point on a hot plate. Prewighed aluminum coupons were coated with the Varnish Mix [Cooper's Creek Chemicals, Cooper Black Tank Paint No 739 (64742-89-8, 8052-42-4, 108-88-3); Sherwin Williams Company, V74B2 Black Asphaltum coating (64742-89-8, 64742-88-7, 8052-42-4)] using a handheld swab. Coupons were weighed a second time to determine the amount of soil added to each coupon. Three coupons were cleaned in each solution for 5 minutes using vapor degreasing. After cooling to room temperature, the coupons were weighed a final time and efficiencies were calculated.

Results:

Summary:

Substrates:	Steel				
Contaminants:	Paints				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
AGA Chemical	AK 225	100	12.39	<input type="checkbox"/>	
DuPont	Vertrel CCA	100	-6.11	<input type="checkbox"/>	
DuPont	Vertrel MCA	100	-5.11	<input type="checkbox"/>	
Micro Care	Heavy Duty Degreaser C	100	-6.85	<input type="checkbox"/>	
Micro Care	Flux Remover C	100	-4.91	<input type="checkbox"/>	
3M	HFE 7100	100	-1.80	<input type="checkbox"/>	
3M	HFE 7200	100	31.65	<input type="checkbox"/>	
Enviro Tech International Inc	Ensolv	100	98.60	<input checked="" type="checkbox"/>	
Poly Systems USA Inc	Solvon Kreussler IP	100	97.54	<input checked="" type="checkbox"/>	
Dow Chemical Company	OS 10	100	10.57	<input type="checkbox"/>	
Dow Chemical Company	OS 20	100	3.06	<input type="checkbox"/>	
Dow Chemical Company	OS 30	100	30.68	<input type="checkbox"/>	

Conclusion: Two of the twelve products removed over 85%.