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. Preweighed 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	☐	
DuPont	Vertrel CCA	100	-6.11	☐	
DuPont	Vertrel MCA	100	-5.11	☐	
Micro Care	Heavy Duty Degreaser C	100	-6.85	☐	
Micro Care	Flux Remover C	100	-4.91	☐	
3M	HFE 7100	100	-1.80	☐	
3M	HFE 7200	100	31.65	☐	
Enviro Tech International Inc	Ensolv	100	98.60	☑	
Poly Systems USA Inc	Solvon Kreussler IP	100	97.54	☑	
Dow Chemical Company	OS 10	100	10.57	☐	
Dow Chemical Company	OS 20	100	3.06	☐	
Dow Chemical Company	OS 30	100	30.68	☐	

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