

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004
DateRun: 05/27/2004
Experimenters: Jason Marshall
ClientType: Lab
ProjectNumber: Project #1
Substrates: Sterling/Silver
PartType: Coupon
Contaminants: Oil
Cleaning Methods: Immersion/Soak
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. The five products were used at full strength in a 250 ml beaker and heated to 96 F on a hot plate. Fifteen preweighed silver plated copper coupons were coated with the Houghton International Cindol 3401 oil (64742-46-7) 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 stir-bar agitation. After cleaning parts were weighed a final time and efficiencies were calculated.

Results:

Summary:

Substrates:	Sterling/Silver				
Contaminants:	Oil				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
DuPont	Vertrel MCA	100	91.50	<input checked="" type="checkbox"/>	
Micro Care	Heavy Duty Degreaser C	100	94.87	<input checked="" type="checkbox"/>	
Micro Care	Flux Remover C	100	89.94	<input checked="" type="checkbox"/>	
3M	HFE 7200	100	98.54	<input checked="" type="checkbox"/>	
Enviro Tech International Inc	Ensolv A	100	96.81	<input checked="" type="checkbox"/>	

Conclusion: All five removed over 85%.