

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003  
 DateRun: 11/20/2003  
 Experimenters: Dave Hout  
 ClientType: Lab  
 ProjectNumber: Project #1  
 Substrates: Stainless Steel  
 PartType: Coupon  
 Contaminants: Lubricating/Lapping Oils  
 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. Six products were heated to 130 F on a hot plate and two products were used at full strength. Twenty four preweighed coupons were coated with Lubricant Houghton MTC-53 and allowed to dry for a half an hour and reweighed. Three coupons were cleaned in each solution for 5 minutes using stir-bar-agitation, rinsed in a tap water bath for 15 seconds at 120 F and dried using air blow off for 30 seconds at 68 F. Coupons were allowed to dry for a half an hour and then reweighed a final time. Efficiencies were calculated.

Results:

Summary:

<b>Substrates:</b>	Stainless Steel				
<b>Contaminants:</b>	Lubricating/Lapping Oils				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Chemtronics Inc	Super Bio Wash	100	105.28	<input type="checkbox"/>	
BCS Company	251 SR	58	102.35	<input checked="" type="checkbox"/>	
Calgon Corporation	Geo Guard 3015	5	99.17	<input checked="" type="checkbox"/>	
Buckeye International	Work Out	5	103.99	<input type="checkbox"/>	
Delta Omega Technologies Ltd	Attar D(R3)	5	101.14	<input checked="" type="checkbox"/>	
Equinox Products	Natural Solutions	5	102.71	<input checked="" type="checkbox"/>	
Chemkleen International Inc.	CT 1 Multipurpose Cleaner	5	102.39	<input checked="" type="checkbox"/>	
BetzDearborne Laboratories Inc	Custom Clean N CC 2278	100	87.50	<input checked="" type="checkbox"/>	

Conclusion: All products were effective at an efficiency rate of over 87%. Two products removed over 93% and were considered ineffective due to compatibility.