

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003  
DateRun: 12/05/2003  
Experimenters: Dave Hout  
ClientType: Lab  
ProjectNumber: Project #1  
Substrates: Stainless Steel  
PartType: Coupon  
Contaminants: Greases  
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. Seven products were heated to 130 F on a hot plate and one product was used at full strength. Twenty-four preweighed coupons were coated with Grease - CRC Industries Multipurpose Super White Grease (647-41-96-4, 7620-77-1, 1314-13-2, 57885-77-3, 13463-67-7) 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>		Greases				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>	
BetzDearborne Laboratories Inc	Custom Clean N CC 2278	100	94.59	<input checked="" type="checkbox"/>		
Buckeye International	Work Out	5	99.35	<input checked="" type="checkbox"/>		
Calgon Corporation	Geo Guard 3015	5	5.11	<input type="checkbox"/>		
Delta Omega Technologies Ltd	Attar D(R3)	5	53.95	<input type="checkbox"/>		
Hurri Kleen Corportion	HurriSafe - Hot Immersion Degreaser	5	80.81	<input type="checkbox"/>		
Heatbath Corporation	MultiKleen LX 1573	5	98.72	<input checked="" type="checkbox"/>		
International Products Corporation	Zymit	5	8.08	<input type="checkbox"/>		
Magnaflux	Daraclean 235	5	29.91	<input type="checkbox"/>		

Conclusion: Three out of eight products were effective at an efficiency rate of over 94%