

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003  
 DateRun: 09/22/2003  
 Experimenters: Jason Marshall  
 ClientType: Lab  
 ProjectNumber: Project #1  
 Substrates: 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. Six products were used at full strength, heated to 120 F on a hot plate. Eighteen preweighed coupons were coated with CRC Industries Multipurpose Super White Grease (64741-96-4, 7620-77-1, 1314-13-2, 57885-77-3, 13463-67-7) and allowed to dry for three days 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 overnight and then reweighed a final time. Efficiencies were calculated.

Note: Bio T Foam Plus was sprayed onto coupons at room temperature and allowed to sit for 5 minutes. The cleaner was then rinsed off.

Results: None of the cleaners removed over 85% of the grease. One product was partially successful, removing just over 70%.

Summary:

Substrates:	Steel					
Contaminants:	Greases					
Company Name:		Product Name:	Conc.:	Efficiency:	Effective:	Observations:
AW Chesterton		278 Super Solv	100	39.00	<input type="checkbox"/>	
Bio Chem Systems		Bio T Foam Plus	100	8.50	<input type="checkbox"/>	
Eastern Color and Chemical Company		Ecobrite Cleaner AK	100	21.77	<input type="checkbox"/>	
EcoLink		Rip Tide	100	21.12	<input type="checkbox"/>	
EcoLink		VG 151	100	70.09	<input type="checkbox"/>	
Gemtek Products		SC EZ Solv Safety Solvent	100	17.76	<input type="checkbox"/>	

Conclusion: No cleaners were successful in removing the grease within five minutes.