

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 Dauber Chemical Co Tectyl 891 Class 1 Cosmoline grease (8052-41-3, 98918-69-4, 64742-65-0, 68608-26-4) 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: Only one product removed over 85% of the soil during the 5-minute immersion cleaning. A second product removed just under 70%.

Summary:

Substrates:	Steel					
Contaminants:	Greases					
Company Name:		Product Name:	Conc.:	Efficiency:	Effective:	Observations:
AW Chesterton		278 Super Solv	100	68.07	<input type="checkbox"/>	
Bio Chem Systems		Bio T Foam Plus	100	13.86	<input type="checkbox"/>	
Eastern Color and Chemical Company		Ecobrite Cleaner AK	100	2.09	<input type="checkbox"/>	
EcoLink		Rip Tide	100	4.87	<input type="checkbox"/>	
EcoLink		VG 151	100	85.02	<input checked="" type="checkbox"/>	
Gemtek Products		SC EZ Solv Safety Solvent	100	15.32	<input type="checkbox"/>	

Conclusion: Increased cleaning time or the addition of agitation would improve the cleaning for 278 Super Solv and VG 151.