

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003
DateRun: 09/26/2003
Experimenters: Jason Marshall, Dave Hout
ClientType: Lab
ProjectNumber: Project #1
Substrates: Stainless Steel
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. Five products were used at full strength, heated to 120 F on a hot plate. Fifteen preweighed coupons were coated with Oil - Mineral (8012-95-1) and allowed to dry over the weekend 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: Bio T Foam Plus was sprayed onto one of the three coupons at room temperature and allowed to sit for 5 minutes. The cleaner was then wiped clean.

Summary:

Substrates:		Stainless Steel				
Contaminants:		Oil				
Company Name:		Product Name:	Conc.:	Efficiency:	Effective:	Observations:
AW Chesterton		278 Super Solv	100	93.17	<input checked="" type="checkbox"/>	
Bio Chem Systems		Bio T Foam Plus	100	97.41	<input checked="" type="checkbox"/>	One coupon only
Invista S.a.r.l		Flexisolv DBE 3 ester	100	95.23	<input checked="" type="checkbox"/>	
Eastern Color and Chemical Company		Ecobrite Cleaner AK	100	95.12	<input checked="" type="checkbox"/>	
Gemtek Products		SC EZ Solv Safety Solvent	100	91.12	<input checked="" type="checkbox"/>	

Conclusion: All the cleaners were effective at an efficiency of over 85%.