

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003
DateRun: 09/22/2003
Experimenters: Jason Marshall
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. Five products were used at full strength, heated to 120 F on a hot plate. Fifteen preweighed coupons were coated with LPS Magnum Teflon Lub 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: All five products removed over 85% of the Teflon lubricant. Three products removed over 96%.

Summary:

Substrates:		Stainless Steel			
Contaminants:		Lubricating/Lapping Oils			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
AW Chesterton	278 Super Solv	100	96.13	<input checked="" type="checkbox"/>	
Bio Chem Systems	Bio T Foam Plus	100	89.07	<input checked="" type="checkbox"/>	
Invista S.a.r.l	Flexisolv DBE 3 ester	100	96.71	<input checked="" type="checkbox"/>	
Eastern Color and Chemical Company	Ecobrite Cleaner AK	100	96.02	<input checked="" type="checkbox"/>	
Gemtek Products	SC EZ Solv Safety Solvent	100	90.26	<input checked="" type="checkbox"/>	

Conclusion: All products were successful in removing the lubricant within the five-minute cleaning time.