

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003
 DateRun: 09/25/2003
 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 - Benign B-5186 (64742-52-5, 9003-29-6, 3964-69-2, 63197-48-8) 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:

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|------------------------------------|---------------------------|---------------|--------------------|-------------------------------------|----------------------|
| Substrates: | Stainless Steel | | | | |
| Contaminants: | Oil | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| AW Chesterton | 278 Super Solv | 100 | 95.81 | <input checked="" type="checkbox"/> | |
| Bio Chem Systems | Bio T Foam Plus | 100 | 36.13 | <input type="checkbox"/> | |
| Invista S.a.r.l | Flexisolv DBE 3 ester | 100 | 80.46 | <input type="checkbox"/> | |
| Eastern Color and Chemical Company | Ecobrite Cleaner AK | 100 | 35.30 | <input type="checkbox"/> | |
| Gemtek Products | SC EZ Solv Safety Solvent | 100 | 63.34 | <input type="checkbox"/> | |

Conclusion: AW Chesterton 278 Super Solv was the only effective cleaner at an efficiency rate of 95.81%.