

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004
 DateRun: 03/12/2004
 Experimenters: 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. One product was used at full strength and seven products were heated to 130 F on a hot plate. Twenty-four preweighed coupons were coated with Oil-Benecyn B-5186 (64742-5, 9003-29-6, 3964-69-2, 63197-48-8) and allowed to dry for a half an hour 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:

Summary:

| Substrates: | Stainless Steel | | | | |
|------------------------------|-------------------------------|--------|-------------|-------------------------------------|---------------|
| Contaminants: | Oil | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Dow Chemical Company | XUS 40571 Development Solvent | 100 | 94.62 | <input checked="" type="checkbox"/> | |
| Calgon Corporation | Geo Guard 3015 | 5 | 90.70 | <input checked="" type="checkbox"/> | |
| Watson Technical Associates | Watson Formula 9000 | 5 | 97.77 | <input checked="" type="checkbox"/> | |
| SOQ Environmental Technology | Ecomate FN | 5 | 94.77 | <input checked="" type="checkbox"/> | |
| US Polychem Corporation | Polychem A 2000 P | 5 | 96.10 | <input checked="" type="checkbox"/> | |
| Buckeye International | XL 100 Cleaner & Degreaser | 5 | 98.56 | <input checked="" type="checkbox"/> | |
| Jet Lube Inc | Jet Lube 5000 | 5 | 97.82 | <input checked="" type="checkbox"/> | |
| Quaker Chemical | Formula 625 XL | 5 | 99.04 | <input checked="" type="checkbox"/> | |

Conclusion: All products were effective at removing the contaminant at an efficiency rate >90%