

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004
 DateRun: 03/29/2004
 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-Mineral Oil (5012-95-1) 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 | 102.00 | <input checked="" type="checkbox"/> | | |
| AW Chesterton | 217 Pressure wash | 5 | 80.32 | <input type="checkbox"/> | | |
| Jet Lube Inc | Jet Lube 5000 | 5 | 83.01 | <input type="checkbox"/> | | |
| Hubbard Hall Inc | Ram Charger | 5 | 99.72 | <input checked="" type="checkbox"/> | | |
| Man Gill Chemical Company | Gillite 1156 | 5 | 97.57 | <input checked="" type="checkbox"/> | | |
| Nensco | DT 600 Press Wash | 5 | 101.63 | <input checked="" type="checkbox"/> | | |
| Buckeye International | XL 100 Cleaner & Degreaser | 5 | 100.69 | <input checked="" type="checkbox"/> | | |

Conclusion: Six out of the eight products were effective at removing the contaminant at an efficiency rate >97%