

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003

DateRun: 03/31/2003

Experimenters: Jason Marshall

ClientType: Lab

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Cutting/Tapping Fluids

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.
Cleaning: 5 min Immersion cleaning with stir-bar agitation @ 120 F
Rinsing: 1/2 min, manual, in 102 F water (tap)
Drying: 30 seconds air blow off, 68 F
Contaminant: Elton Corp Option 1 Cutting Fluid CAS# 1312-76-1, 265-18-2

Results:

Summary:

| Substrates: | | Aluminum | | | |
|---------------------------|---------------------------------------|------------------------|-------------|-------------------------------------|---------------|
| Contaminants: | | Cutting/Tapping Fluids | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Metabolix Inc | Metabolix E3HB | 100 | 38.29 | <input type="checkbox"/> | |
| Florida Chemical Company | Citrus Burst 7 | 100 | 57.72 | <input type="checkbox"/> | |
| Brulin Corporation | Nature Sol 100 | 100 | 93.50 | <input checked="" type="checkbox"/> | |
| Twin Rivers Technologies | Methyl Ester 1618 | 100 | 40.51 | <input type="checkbox"/> | |
| AG Environmental Products | Canola Gold CE110 | 100 | 75.80 | <input type="checkbox"/> | |
| AG Environmental Products | Soy Clear 1500 | 100 | 76.36 | <input type="checkbox"/> | |
| Vertec BioSolvents | Take Off Green | 100 | 75.51 | <input type="checkbox"/> | |
| Vertec BioSolvents | Paint stripper | 100 | 85.83 | <input checked="" type="checkbox"/> | |
| Vertec BioSolvents | VertecBio Gold Unscented Part Cleaner | 100 | 72.24 | <input type="checkbox"/> | |
| Pentone Corporation | Citrikleen XPC | 100 | 99.65 | <input checked="" type="checkbox"/> | |
| Inland Technologies Inc | Citrasafe | 100 | 99.77 | <input checked="" type="checkbox"/> | |

Conclusion: After cleaning, wiping was performed to see if efficiencies would increase significantly. Trial 256 shows these results.