

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003

DateRun: 10/17/2003

Experimenters: Dave Hout

ClientType: Lab

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Coatings

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. Four products were used at full strength at room temperature and another four were heated to 130 F on a hot plate. Twenty-four preweighed coupons were coated with Ferrocote 581 LVO 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:

|                           |                            |               |                    |                                     |                      |  |
|---------------------------|----------------------------|---------------|--------------------|-------------------------------------|----------------------|--|
| <b>Substrates:</b>        |                            | Aluminum      |                    |                                     |                      |  |
| <b>Contaminants:</b>      |                            | Coatings      |                    |                                     |                      |  |
| <b>Company Name:</b>      | <b>Product Name:</b>       | <b>Conc.:</b> | <b>Efficiency:</b> | <b>Effective:</b>                   | <b>Observations:</b> |  |
| Finger Lakes Chemical     | Safer Stuff                | 100           | 89.94              | <input checked="" type="checkbox"/> |                      |  |
| Man Gill Chemical Company | Gillite 1156               | 100           | 57.99              | <input type="checkbox"/>            |                      |  |
| National Diagnostic       | Histo Clear                | 100           | 97.31              | <input checked="" type="checkbox"/> |                      |  |
| Universal Photonics       | Uni Clear                  | 100           | 89.28              | <input checked="" type="checkbox"/> |                      |  |
| Today & Beyond            | Beyond 2003                | 5             | 71.59              | <input type="checkbox"/>            |                      |  |
| US Polychem Corporation   | Polychem A 2000 P          | 5             | 92.21              | <input checked="" type="checkbox"/> |                      |  |
| Buckeye International     | XL 100 Cleaner & Degreaser | 5             | 92.06              | <input checked="" type="checkbox"/> |                      |  |
| Dow Chemical Company      | PnB Glycol Ether           | 5             | 99.87              | <input checked="" type="checkbox"/> |                      |  |

Conclusion: Three out of the four products used at 100% were effective at an efficiency rate of over 85%. Three out of the four products used at 5% were also effective at the same efficiency rate.