

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003

DateRun: 12/08/2003

Experimenters: Dave Hout

ClientType: Lab

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Fluxes

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. Two products were heated to 130 F on a hot plate and two others were used at full strength. Twelve preweighed coupons were coated with Flux - Kester Solder Flux 1544 (64-17-5, 78-92-2) (8050-09-7) 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: | | Aluminum | | | | |
| Contaminants: | | Fluxes | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: | |
| Chemkleen International Inc. | CT 1 Multipurpose Cleaner | 5 | 97.90 | <input checked="" type="checkbox"/> | | |
| Calgon Corporation | Geo Guard 3015 | 5 | 4.41 | <input type="checkbox"/> | | |
| EcoLink | Positron | 100 | 4.05 | <input type="checkbox"/> | | |
| Kyzen Corporation | Ionox HC | 100 | 101.88 | <input checked="" type="checkbox"/> | | |

Conclusion: Half of the products were effective at an efficiency rate of over 97%