

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1998
 DateRun: 10/01/1998
 Experimenters: Jason Marshall
 ClientType: Name Plate Mfg-Etching
 ProjectNumber: Project #1
 Substrates: Aluminum
 PartType: Part
 Contaminants: None
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Gravimetric, Visual, Wipe

Purpose: To determine compatibility of new cleaning product with surface paint.

Experimental Procedure: Initial weights of 3 customer-supplied coupons were recorded. The cleaning solution was used at 100% solution and room temperature. Three coupons were placed in each cleaning chemistry. After soaking for 24 hours, the coupons were removed from the cleaner, rinsed in tap water at 120 oF and wiped dry with a white paper towel. Observations were made during the wiping to determine if any of the paint was removed. SUBSTRATE MATERIAL: Aluminum 3003 with paint (not to be removed)
 CONTAMINANTS: None

Results: Soy Gold 2000 showed no signs of removing the paint from the coupons. Since the product was rinsable in water, there were not as slick as the coupons soaked in Soy Gold 1000 (from 98-676-04-4). The gravimetric analysis in Table 1 shows that there was some weight increase for each of the 3 coupons.

Table 1. Gravimetric Analysis

| | A | B | C | Average | Std Dev |
|-------------|---------|---------|---------|---------|---------|
| Initial | 11.1853 | 11.2946 | 11.5284 | 11.3361 | 0.1753 |
| Final | 11.202 | 11.2989 | 11.5344 | 11.3451 | 0.1709 |
| Weight Gain | 0.0153 | 0.0036 | 0.0052 | 0.00803 | 0.00634 |
| % Increase | 0.1368 | 0.0319 | 0.0451 | 0.0713 | 0.05713 |

The two Soy Gold products tested yielded similar results in weight gain and increase in weights.
 Table 2. Comparison of Soy Gold 1000 & 2000

| Average Values | Soy Gold 1000 | Soy Gold 2000 |
|-----------------|---------------|---------------|
| Weight Gain (g) | 0.00857 | 0.008 |
| % Increase | 0.0753 | 0.0713 |

Summary:

| | | | | | | |
|---------------------------|----------------------|---------------|--------------------|-------------------------------------|----------------------|--|
| Substrates: | Aluminum | | | | | |
| Contaminants: | None | | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: | |
| AG Environmental Products | Soy Gold 2000 | 100 | | <input checked="" type="checkbox"/> | | |

Conclusion: Soy Gold 2000 was proven to be compatible with the paint on the client supplied coupons. The next test will be to compare the cleaning efficiencies of the Soy Gold products on the new contaminant solution.