

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2020
 DateRun: 08/14/2020
 Experimenters: Justin Kiander
 ClientType: Metal Working
 ProjectNumber: Project #1
 Substrates: Aluminum
 PartType: Coupon
 Contaminants: Buffing/Polishing Compounds
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Gravimetric, Visual

Purpose: To test the effectiveness of Surface Cleanse 930 on the removal of various contaminants.

Experimental Procedure: Three sets of three pre-weighted aluminum coupons were soiled with their respective contaminants using a cotton swab. Each set of coupons were immersed into a beaker with Surface Cleanse 930 at a concentration of 5%, for 15 minutes at a temperature of 120° F. During this process, any noticeable soil removal was observed. Coupons were dried with a heat gun as well as with a manual wipe afterwards, to inhibit the cleaner creating visual damage to the substrates. After drying, final weights were recorded, and efficiency was calculated for each coupon cleaned.

Results:

| Cleaner | Soil | Coupon | Initial wt. of cont. | Final wt. cont. | % Cont. Removed | Average |
|--------------------------|-------|--------|----------------------|-----------------|-----------------|---------|
| Surface Cleanse 930 (5%) | Red | 8 | 0.0129 | 0.0025 | 80.62 | 83.93 |
| | | 10 | 0.0245 | 0.0043 | 82.45 | |
| | | 13 | 0.0275 | 0.0031 | 88.73 | |
| | Blue | 14 | 0.0541 | 0.0056 | 89.65 | 87.90 |
| | | 16 | 0.0357 | 0.0028 | 92.16 | |
| | | 17 | 0.0569 | 0.0103 | 81.90 | |
| | White | 19 | 0.0147 | 0.0028 | 80.95 | 82.51 |
| | | 21 | 0.0217 | 0.0044 | 79.72 | |
| | | 22 | 0.0472 | 0.0062 | 86.86 | |

Summary:

| | | | | | |
|------------------------------------|--|--|--|-------------------------------------|----------------------|
| Substrates: | | Aluminum | | | |
| Contaminants: | | Buffing/Polishing Compounds | | | |
| Company Name: | | Product Name: | | Conc.: | Efficiency: |
| International Products Corporation | | Surface Cleanse Concentrated Neutral 930 | | 5 | 84.47 |
| | | | | Effective: | Observations: |
| | | | | <input checked="" type="checkbox"/> | |

Conclusion:

Visually Surface Cleanse 930 did not generate much removal but did perform gravimetrically very similarly for all three soils. The subsequent step is to keep the time and temperature constant and introduce agitation in the form of ultrasonics.