

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2007
 DateRun: 01/30/2007
 Experimenters: Jason Marshall
 ClientType: Cleaner Manufacturer
 ProjectNumber: Project #1
 Substrates: Aluminum, Ceramics
 PartType: Coupon
 Contaminants: Greases, Oil
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric

Purpose: To evaluate supplied cleaner for oil-grease cleaning using manual wiping.

Experimental Procedure: The supplied cleaning product was used at the recommended concentration (2%).
 Three preweighed aluminum and ceramic coupons were coated with an oil-grease mix collected from a dirty engine using a handheld swab and allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added.
 Three coupons were placed into a Gardner Straight Line Washability unit. A Wypall X60 reinforced wipe was attached to the cleaning sled and soaked with 5-7 sprays of cleaning solutions. Each coupon was sprayed 7-10 times with the same cleaning solution. The solution was allowed to penetrate for 30 seconds followed by cleaning in the SLW unit for 20 cycles (~30 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded, and efficiencies recorded.

Results: The #120 Peroxide Multisurface Cleaner was effective in removing the oil-grease mix from the two surface types. The table lists the amount of soil added, the amount remaining and the efficiency for each coupon cleaned.

| Cleaner | Initial wt | Final wt | % Removed |
|----------|------------|----------|-----------|
| Aluminum | 0.0387 | 0.0069 | 82.17 |
| | 0.0239 | 0.0045 | 81.17 |
| | 0.0289 | 0.0044 | 84.78 |
| Ceramic | 0.0206 | 0.0008 | 96.12 |
| | 0.0135 | 0.0013 | 90.37 |
| | 0.0109 | 0.0017 | 84.40 |

Summary:

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|-----------------------|--------------------------------------|--------------------|---------------|--------------------|-------------------------------------|----------------------|
| Substrates: | | Aluminum, Ceramics | | | | |
| Contaminants: | | Greases, Oil | | | | |
| Company Name: | Product Name: | | Conc.: | Efficiency: | Effective: | Observations: |
| Next-Gen Supply Group | PC 120 Peroxide Multisurface Cleaner | | 2 | 86.50 | <input checked="" type="checkbox"/> | |

Conclusion: The #120 Peroxide cleaner removed over 85% of the oil-grease mix using manual wiping for cleaning.