

# 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:

<b>Substrates:</b>		Aluminum, Ceramics				
<b>Contaminants:</b>		Greases, Oil				
<b>Company Name:</b>	<b>Product Name:</b>		<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
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.