CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006

DateRun: 10/09/2006

Experimenters: Jason Marshall

ClientType: Lab

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Carbon Deposits, Greases, Oil

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: Laboratory evaluations of alternative aerosol cleaning products

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning.

Two products were selected for testing based on equipment compatibility and soil removal. The two products were used at full strength in 250 ml beakers. Products were used at room temperature. Six preweighed aluminum coupons were coated with a collection of brake/engine soil collected from an automobile shop. The coupons were allowed to sit for several days before a second weight was recorded. Three coupons were cleaned in each solution for 5 minutes using minimal agitation from a magnetic stir bar. Coupons were then rinsed in tap water for 15 seconds and dried using air blow off at room temperature for 30 seconds. Following drying, final weights were recorded and cleaning efficiencies were calculated.

Results: The table lists the amount of soil added, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
Citrus Soil 1	0.2188	0.0541	75.27
	0.1777	0.0301	83.06
	0.1853	0.0253	86.35
Canola Gold CE 110	0.3455	0.244	29.38
	0.3291	0.2677	18.66
	0.2502	0.247	1.28

Summary:

Substrates:	Aluminum
Contaminants:	Carbon Deposits, Greases, Oil

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Bi-O-Kleen Industries	Citrus Soy Solvent Cleaner & Degreaser	100	81.56	☑	
AG Environmental Products	Canola Gold CE110	100	16.44	☐	

Conclusion: The Citrus Soy has been the most successful product tested so far under the room temperature immersion cleaning.