CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005

DateRun: 11/09/2005

Experimenters: Jason Marshall

ClientType: Lab

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Lubricating/Lapping Oils

Cleaning Methods: Low Pressure Spray

Analytical Methods: Gravimetric

Purpose: Laboratory evaluations of alternative cleaning products

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

Six preweighed aluminum coupons were coated with Keystone Nevastane 6 Food Machinery Lubricating Oil (64742-47-8, 8042-47-5, 9003-29-6) by spray application and wiping with a handheld swab. Coupons were reweighed to determine the amount of soil added. Two aqueous products were diluted to 5% using DI water and were placed in a 500 ml glass bottle. An adapter designed to convert the liquid solution into a spray aerosol was used in conjunction with Crown Spra-Tool (propane and isobutane) as the propellant. Each aqueous product was used for about 1 minute at room temperature. After cleaning coupons were allowed to air dry for 30 minutes at room temperature. At the end of drying, final weights were recorded, and removal efficiencies were calculated for each coupon cleaned.

Results: The Brulin Corp product removed over 75% of the lubricant using the aerosol application technique. The other product removed less than 30%. The table lists the amount of soil added, the amount remaining and the efficiency.

Cleaner	Initial wt	Final wt	% Removed
KPC 820 N	0.1403	0.1143	18.53
	0.1791	0.1165	34.95
	0.1495	0.1033	30.90
815 GD	0.3361	0.0606	81.97
	0.2877	0.0703	75.56
	0.2703	0.0711	73.70

Summary:

Substrates:	Aluminum				
Contaminants:	Lubricating/Lapping Oils				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
AW Chesterton	KPC 820 N	5	28.10	☐	Aersol deilvery
Brulin Corporation	Formula 815 GD	5	77.10	☐	Aerosol deilvery

Conclusion: One product showed moderate success as an aerosol cleaner.