CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 05/25/2004

Experimenters: Jason Marshall

ClientType: Lab

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Oil

Cleaning Methods: Immersion/Soak

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.

Each product was used at full strength in a 250 ml beaker and heated to 96 F on a hot plate. Fifteen preweighed aluminum coupons were coated with the Nisseki SAS 40 oil (27776-01-8, 612-00-0, 103-29-7, 101-81-5) using a handheld swab. Coupons were weighed a second time to determine the amount of soil added to each coupon. Three coupons were cleaned in each solution for 5 minutes using stir-bar agitation. After cleaning parts were allowed to sit for 10 minutes for drying at room temperature. The coupons were weighed a final time and efficiencies were calculated.

Results:

Cleaner	Initial wt	Final wt	% Removed
Solvon PB	0.0826	0.0033	96.00
	0.1322	0.0015	98.87
	0.1582	0.0021	98.67
Solvon IP	0.0777	0.0029	96.27
	0.1685	0.0021	98.75
	0.1965	0.0041	97.91
OS 10	0.1755	0.0020	98.86
	0.0714	0.0022	96.92
	0.1539	-0.0017	101.10
OS 20	0.1155	0.0003	99.74
	0.2157	0.0002	99.91
	0.1126	0.0010	99.11
OS 30	0.0787	0.0153	80.56
	0.1285	0.0139	89.18
	0.1051	0.0216	79.45

Summary:

Substrates:	Aluminum
Contaminants:	Oil

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Poly Systems USA Inc	Solvon Kreussler PB	100	97.85	☑	
Poly Systems USA Inc	Solvon Kreussler IP	100	97.64	☑	
Dow Chemical Company	OS 10	100	98.96	☑	
Dow Chemical Company	OS 20	100	99.59	☑	
Dow Chemical Company	OS 30	100	83.06	☐	

Conclusion: Four of the five products removed over 85%.