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 Soltex Polybutene 32 (9003-29-6) 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 weighed a final time and efficiencies were calculated.

Results:

Cleaner	Initial wt	Final wt	% Removed
Solvon PB	0.9559	0.0031	99.68
	0.8047	0.0028	99.65
	0.5252	0.0022	99.58
Solvon IP	0.8074	0.0009	99.89
	0.5566	0.0004	99.93
	0.3519	0.0010	99.72
OS 10	0.6319	0.0617	90.24
	0.5133	0.0532	89.64
	0.6708	0.1791	73.30
OS 20	0.9703	0.5957	38.61
	0.3438	0.1393	59.48
	0.6553	0.3556	45.73
OS 30	0.7523	0.6048	19.61
	0.7418	0.5511	25.71
	0.8016	0.5047	37.04

Summary:

Substrates:	Aluminum
Contaminants:	Oil

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Poly Systems USA Inc	Solvon Kreussler PB	100	99.64	☑	
Poly Systems USA Inc	Solvon Kreussler IP	100	99.84	☑	
Dow Chemical Company	OS 10	100	84.39	☐	
Dow Chemical Company	OS 20	100	47.94	☐	
Dow Chemical Company	OS 30	100	27.45	☐	

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