CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 06/22/2008

Experimenters: Jason Marshall, Shweta Bansal

ClientType: Chemical Company

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Resins/Rosins

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To evaluate selected products for resin cleaning.

Experimental Procedure: Eight products were selected from the lab's on-line database, www.cleanersolutions.org, based on supplied information from client. Each product was diluted to 5% using DI water in 600 ml glass beakers. Solutions were used at room temperature. Twenty-four preweighed aluminum coupons were coated with the Mereco ECN 809 Base Black resin using a swab. Coupons were weighed a second time to determine the amount of soil added. Three coupons were immersed into each product and cleaned for 5 minutes using no agitation. Following cleaning, coupons were rinsed for 15 seconds in tap water at 120 F and dried using air blow off for 30 seconds at room temperature. Final weights were recorded, and efficiencies were calculated.

Results: Only one of the eight products had any effect on the resin during immersion cleaning. The table lists the amount of resin added, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
Polyspray Jet 790 xs	2.4839	2.4365	1.91
	2.5648	2.5610	0.15
	2.5668	2.5490	0.69
Luminox	1.0467	0.9968	4.77
	4.5916	4.5480	0.95
	1.7731	1.8235	-2.84
Daraclean 282 GF	1.4360	1.4315	0.31
	1.1101	1.1072	0.26
	2.1659	2.1620	0.18
Aquavantage 3800 Gd	2.4287	2.1280	12.38
	2.5287	2.1730	14.07
	1.7745	1.7773	-0.16
Amaizing Stripper	2.1694	1.8281	15.73
	2.1371	2.0148	5.72
	2.3150	2.1788	5.88
Bean-e-doo	2.7812	2.7403	1.47
	2.2138	2.1210	4.19
	1.5519	1.5743	-1.44
BG Clean 617	2.1926	2.1863	0.29
	2.6816	2.6732	0.31
	2.9742	2.9775	-0.11
Smart Solve 605	2.0938	1.7721	15.36
	2.0214	1.0419	48.46
	2.9870	2.2441	24.87

Summary:

Substrates:	Aluminum				
Contaminants:	Resins/Rosins				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
US Polychem Corporation	Polyspray Jet 790 XS	10	0.92	☐	
Alconox Inc	Luminox	10	0.96	☐	

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Magnaflux	Daraclean 282 GF	10	0.25	☐	
Brulin Corporation	Aquavantage 3800 GD	10	8.76	☐	
Green Products	aMAIZEing biobased solvent and stripper	10	9.11	☐	
Franmar Chemical	Bean-e-doo (Parts Washer Solvent)	10	1.41	☐	
BioGenesis Enterprises Inc	BG Clean 617	10	0.16	☐	
United Laboratories International	Smart Solve 605	10	29.56	☑	

Conclusion: The Smart Solve 605 will be used in a follow up test at a higher concentration. In addition, semi-aqueous products will be selected for evaluation.