CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016

DateRun: 09/06/2016

Experimenters: Sabrina Apel

ClientType: Jewelry Mfr

ProjectNumber: Project #3

Substrates: Aluminum

PartType: Coupon

Contaminants:

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric, Visual

Purpose: To evaluate the effectiveness of various cleaners in removing Masterdraw L240B from aluminum coupons.

Experimental Procedure: Four cleaners were tested at room temperature on aluminum coupons to evaluate how Masterdraw L240B soil was cleaned. Preweighed coupons were coated with each supplied soil using a hand held swab for each substrate and weighed a second time to determine the amount of soil added. Each cleaner was put in a beaker and each coupon were placed separately and immersed into the solution for 5 minutes. The coupons were then stood upright to air dry for 15 minutes and then placed on a tray. There was no rinse. Once dry, final weights were recorded and efficiency was calculated for each coupon cleaned.

Results:

Cleaner	Initial wt of cont.	Final wt of cont.	%Cont Removed
Fluosolv CX	0.1077	0.0095	91.18
	0.1762	0.0093	94.72
	0.1348	0.0099	92.66
Fluosolv NC	0.1243	0.0057	95.41
	0.1472	0.0187	87.30
	0.1517	0.0067	95.58
Vertrel Sion	0.1259	0.0062	95.08
	0.1503	0.0069	95.41
	0.1521	0.0034	97.76
Solstice PF	0.1081	0.0206	80.94
	0.0884	0.0213	75.90
	0.0933	0.0249	73.31

Summary:

Substrates:	Aluminum				
Contaminants:					
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
NuGeneration Technologies, LLC	FluoSolv CX	100	92.85	☑	
NuGeneration Technologies, LLC	FluoSolv NC 786	100	92.76	☑	
DuPont	Vertrel Sion	100	96.08	☑	
Honeywell	Solstice PF with N2	100	76.72	☐	

Conclusion: Ecolink Fluosolv CX, Ecolink Fluosolv NC, and DuPont Vertrel Sion efficiently removed #1 Masterdraw L240B on aluminum at room temperature using immersion. Honeywell Solstice PF cleaned least efficiently. DuPont Vertrel Sion cleaned most efficiently with an overall efficiency of 96.08%.