CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016

DateRun: 03/20/2016

Experimenters: Carla De La Cruz

ClientType:

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Greases

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To evaluate the efficiency that various cleaning methods can remove Momentive Grease from aluminum coupons\substrate.

Experimental Procedure: Aluminum coupons were selected and arranged into rows of 3 coupons, a row per cleaner. Initial weights were taken, and coupons were soiled and reweighed. The lower third of the coupons were soiled. Beakers with drop in solvent replacement solutions were set up on stirring plates equipped with a stir bar. The coupons were immersed for 5 minutes. Observations were taken during the cleaning process. The coupons were dried on a rack for 15 minutes. Final weights were recorded.

Results: The Solstice PF and Vertrel Sion were very effective in the removal of the Momentive Grease.

Cleaner	Initial Wt.	Clean Wt.	% Removal
FluoSolv CX	0.1561	0.0512	67.20
	0.1135	0.0282	75.15
	0.1153	0.0253	78.06
FluoSolv NC	0.1023	0.0253	75.27
	0.1094	0.0209	80.90
	0.0734	0.0228	68.94
Solstice PF	0.0956	0.0114	88.08
	0.0787	0.0123	84.37
	0.0840	0.0120	85.71
Solstice PF-2A	0.0849	0.0156	81.63
	0.0522	0.0142	72.80
	0.0883	0.0235	73.39
FluoSolv CX-500	0.1412	0.1286	8.92
	0.1673	0.1546	7.59
	0.1465	0.1348	7.99
FluoSolv FR-100	0.1845	0.1753	4.99
	0.1764	0.1668	5.44
	0.1740	0.1631	6.26
Vertrel Sion	0.1426	0.0430	69.85
	0.1501	0.0162	89.21
	0.2822	0.0034	98.80

Summary:

Substrates:	Aluminum				
Contaminants:	Greases				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**

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NuGeneration Technologies, LLC	FluoSolv CX	100	73.47	☐	
NuGeneration Technologies, LLC	FluoSolv NC 786	100	75.04	☐	
Honeywell	Solstice PF with N2	100	86.05	☑	
Honeywell	Solstice PF-2A with N2	100	75.94	☐	
DuPont	Vertrel Sion	100	85.95	☑	
NuGeneration Technologies, LLC	FluoSolv CX	100	8.16	☐	
NuGeneration Technologies, LLC	Fluosolv FR-100	100	5.56	☐	

Conclusion: Based on the lab results, only Solstice PF and Vertrel Sion were effective in removing the Momentive grease.