CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016

DateRun: 03/15/2016

Experimenters: Catherine York

ClientType:

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Greases

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To conduct testing on possible drop in solvents for cleaning of the Dow Corning Vacuum grease.

Experimental Procedure: Aluminum coupons were arranged into rows of 3. Once the initial weights were taken, the lower third of the coupons were soiled. The coupons were places into the solvent drop in replacement solutions. Observations were taken during the process. The coupons were immersed for 5 minutes and removed to air dry on a drying rack for 15 minutes. Final weights were recorded once the coupons were dried.

Results: All the drop-in solvents replacement products left a white film after drying is complete.

Cleaner	Initial Wt.	Clean Wt.	% Removal
FluoSolv CX			
	0.2444	0.0179	92.67
	0.2015	0.0020	99.01
	0.1862	0.0020	98.92
FluoSolv NC			
	0.1874	0.0340	81.85
	0.2121	0.0018	99.15
	0.1412	0.0005	99.64
Solstice PF			
	0.3546	0.0188	94.69
	0.0676	0.0076	88.75
	0.2349	0.0055	97.65
Solstice PF-2A			
	0.1445	0.0163	88.72
	0.2089	0.0053	97.46
	0.2697	0.0017	99.36
Vertrel Sion			
	0.6582	0.5137	21.95
	0.4454	0.1804	59.50
	0.4693	0.3650	22.22
FluoSolv CX-500			
	0.4652	0.4338	6.75
	0.5193	0.4962	4.45
	0.5376	0.5153	4.15
FluoSolv FR-110			
	0.7155	0.6953	2.82
	0.6374	0.6224	2.35
	0.7600	0.7393	3.21

Summary:

Substrates:	Aluminum				
Contaminants:	Greases				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
NuGeneration Technologies, LLC	FluoSolv CX	100	96.87	☑	

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NuGeneration Technologies, LLC	FluoSolv NC 786	100	93.55	☑	
Honeywell	Solstice PF with N2	100	93.70	☑	
Honeywell	Solstice PF-2A with N2	100	95.18	☑	
DuPont	Vertrel Sion	100	34.56	☐	
NuGeneration Technologies, LLC	Fluosolv FR-100	100	2.79	☐	
NuGeneration Technologies, LLC	FluoSolv CX	100	5.12	☐	

Conclusion: FluoSolv CX, FluoSolv NC, Solstice PF and Solstice PF-2A were effective in removing the grease with an average remove rate above 90%. However, the performance of Vertrel Sion, FluoSolv CX-500 and FluoSolv FR-100 was very disappointing with removal rate ranging between 2.8% to 34%.