

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016

DateRun: 03/04/2016

Experimenters: Vinh Tran, Catherine York, Alicia McCarthy

ClientType:

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Part

Contaminants: Greases

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To evaluate the efficiency of various heated drop in solvent replacements removing DOW Corning Vacuum Grease from Stainless Steel substrates .

Experimental Procedure: Stainless steel coupons were weighed to get their initial weights. The bottom third of each coupon was coated in the DOW Corning Vacuum Grease. The coupons were re-weighed. The weights were recorded. The coupons were placed in the heated drop-in solvent replacement for 5 minutes. The coupons were removed out of the and placed to dry on a rack for 15 minutes. Then the final weights were taken.

Results:	Cleaner	Initial wt	Final wt	% Removal
	Fluosolv NC	0.4196	0.1339	68.09
		0.3479	0.0282	91.89
		0.1661	0.0024	98.56
	Fluosolv CX	0.4909	0.2131	56.59
		0.4110	0.0055	98.66
		0.4366	0.0040	99.08
	Ethyl 408	0.3734	0.0048	98.71
		0.3023	0.0074	97.55
		0.2106	0.0119	94.35
	Methyl 408	0.1956	0.0006	99.69
		0.2116	0.0036	98.30
		0.1456	0.0048	96.70
	Honeywell PF	0.3657	0.1273	65.19
		0.2377	0.0068	97.14
		0.1475	0.0055	96.27
	Honeywell PF 2A	0.1879	0.0140	92.55
		0.1976	0.0187	90.54
		0.2125	0.0430	79.76
	Vertrel Sion	0.4502	0.0384	91.47
		0.3919	0.0392	90.00
		0.3514	0.0042	98.80
	Fluosolv CX-500	1.2029	1.1660	3.07
		0.9366	0.9000	23.89
		1.0358	1.0494	-1.31
	Fluosolv FR-110	0.3736	0.3467	7.20
		0.4298	0.3955	7.98
		0.4881	0.6855	-40.44

Summary:

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Substrates:	Stainless Steel				
Contaminants:	Greases				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
NuGeneration Technologies, LLC	FluoSolv NC 786	100	86.18	<input checked="" type="checkbox"/>	
NuGeneration Technologies, LLC	FluoSolv CX	100	84.78	<input checked="" type="checkbox"/>	
NuGeneration Technologies, LLC	Fluosolv FR-100	100	-8.42	<input type="checkbox"/>	
Xf Technologies	Ethyl 408	100	96.87	<input checked="" type="checkbox"/>	
Xf Technologies	Methyl 408	100	98.23	<input checked="" type="checkbox"/>	
Honeywell	Solstice PF with N2	100	86.20	<input checked="" type="checkbox"/>	
Honeywell	Solstice PF-2A with N2	100	87.62	<input checked="" type="checkbox"/>	
DuPont	Vertrel Sion	100	93.42	<input checked="" type="checkbox"/>	
NuGeneration Technologies, LLC	FluoSolv CX-500	100	1.88	<input type="checkbox"/>	

Conclusion: The heated Fluosolv FR-100 and Fluosolv CX-500 did not perform well in removing Dow Corning Vacuum Grease.