

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016

DateRun: 03/20/2016

Experimenters: Carla De La Cruz

ClientType:

ProjectNumber: Project #1

Substrates: Brass

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 Brass coupons\substrate.

Experimental Procedure: Brass 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:

Cleaner	Initial wt of cont.	Final wt of cont.	%Cont Removed
FluoSolv CX	0.2139	0.0052	97.57
	0.0814	0.0004	99.51
	0.1651	0.0163	90.13
FluoSolv NC	0.1846	0.0027	98.54
	0.1267	0.0055	95.66
	0.1342	0.0054	95.98
Honeywell PF	0.1894	0.0004	99.79
	0.1947	0.0008	99.59
	0.1950	0.0025	98.72
Honeywell PF 2A	0.1246	0.0019	98.48
	0.1420	0.0002	99.86
	0.1483	0.0009	99.39
Vertrel Sion	0.1245	0.0193	84.5
	0.1907	0.0668	64.97
	0.1074	0.0187	82.59
Fluosolv CX-500	0.1956	0.1840	5.93
	0.1601	0.1502	6.18
	0.1509	0.1407	6.76
Fluosolv FR-110	0.1616	0.1554	3.84
	0.2280	0.2184	4.21
	0.1711	0.1631	4.68

Summary:

<b>Substrates:</b>	Brass					
<b>Contaminants:</b>	Greases					
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:	
NuGeneration Technologies, LLC	FluoSolv CX	100	95.74	<input checked="" type="checkbox"/>		
NuGeneration Technologies, LLC	FluoSolv NC 786	100	96.73	<input checked="" type="checkbox"/>		
Honeywell	Solstice PF with N2	100	99.37	<input checked="" type="checkbox"/>		
Honeywell	Solstice PF-2A with N2	100	99.24	<input checked="" type="checkbox"/>		
DuPont	Vertrel Sion	100	77.35	<input type="checkbox"/>		

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NuGeneration Technologies, LLC	FluoSolv CX	100	6.29	<input type="checkbox"/>	
NuGeneration Technologies, LLC	Fluosolv FR-100	100	4.24	<input type="checkbox"/>	

Conclusion: Based on the lab results, Fluosolv CX, Fluosolv NC, Solstice PF, and Solstice PF-2A were effective in removing the Momentive grease.