CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2015

DateRun: 11/30/2015

Experimenters: Rhoda Gindi

ClientType: General

ProjectNumber: Project #1

Substrates: Brass

PartType: Part

Contaminants: Dirt, Oil

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric, Visual

Purpose: To evaluate the efficacy of cleaners in removing oil and dirt from brass coupons

Experimental Procedure: Initial weights were recorded for the brass coupons. The coupons were coated with the half a gram of the oil contaminant and re- weighed. The coupons were then submerged for one minute into different cleaners to be determine the % of contaminant removal. For five of the cleaners, the coupons were place in a beaker containing DI water. Once removed from the DI water, a blow dryer was used for 20 seconds to remove residual water. Visual observation and re-weighing of contaminate removal were recorded.

Results:

Cleaner	Initial Wt.	Final Wt.	% Removed
BioSolv	0.4248	0.0110	97.41
	0.5055	0.0253	95.00
	0.6076	0.0255	95.80
CB100 ALU	0.5447	0.0207	96.20
	0.5683	0.0441	92.24
	0.5260	0.0408	92.25
SC Aircraft and Metal Cleaner	0.5554	0.1174	78.86
	0.5453	0.0201	96.31
	0.4597	0.1419	69.13
Amberclean L 12	0.5855	0.0145	97.52
	0.5515	0.0668	87.89
	0.5389	0.0231	95.71
SolSafe	0.5274	0.0127	97.59
	0.5136	0.0072	98.60
	0.5510	0.0092	98.33

Summary:

Substrates:	Brass
Contaminants:	Dirt, Oil

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Phoenix Resins Inc	BioSolv	100	96.07	☑	
J Walter Inc.	Bio Circle CB 100 ALU	100	93.56	☑	
Gemtek Products	SC Aircraft & Metal Cleaner Super Concentrate	100	81.44	☐	
Innovative Organics Inc	Amberclean L 12	100	93.71	☑	
Bio Chem Systems	Solsafe 245	100	98.17	☑	

Conclusion: Although all the cleaners worked well, SolSafe has the highest percentage of oil removal.