CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2020

DateRun: 10/04/2020

Experimenters: Justin Kiander

ClientType: Aircraft Parts Manufacturer

ProjectNumber: Project #1

Substrates: Glass/Quartz

PartType: Coupon

Contaminants: Resins/Rosins

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric, Visual

Purpose: The purpose of this experiment was to perform a 60-minute heated immersion test on Mirachem 500 using Contaminant #4. Test requested by company.

Experimental Procedure: A solution of Mirachem 500 was prepared to a concentration of 25% and heated to 120°F. Three glass coupons were obtained, and an initial weight was recorded. Coupons were then soiled with Rosin #4 and a dirty weight was recorded. Once the cleaning solution reached the proper temperature, coupons were submerged into the beaker for 60 minutes with observations recorded at 5, 15, 30 and 60 minutes. Coupons air-dried for 24 hours, and a clean weight was recorded. The effectiveness of the cleaner was determined.

Results:

Cleaner	Initial wt of cont	Final wt of cont	%Cont Removed	%AVG	Observations
Mirachem 500	0.1047	0.0101	90.35	64.44	5: Soil still present, slight dissolve
	0.1953	0.0857	56.12		15: Some dissolving on all coupons
	0.2883	0.1532	46.86		30: Soil slowly dissolving
					60: Coupon 1: Almost all soil gone, Coupon 2: Some soil removed, Coupon 3: Little soil removed

Summary:

Substrates:	Glass/Quartz				
Contaminants:	Resins/Rosins				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Mirachem Corporation	Mirachem 500	25%	64.44	☐	

Conclusion: Mirachem 500 removed an average of 64.44% of soil from glass coupons via heated immersion.