CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1998

DateRun: 07/08/1998

Experimenters: Jason Marshall

ClientType: Vessel Cleaning Company

ProjectNumber: Project #2

Substrates: Liquid

PartType: Coupon

Contaminants: Resins/Rosins

Cleaning Methods:

Analytical Methods: Visual

Purpose: To find a cleaning chemistry that can dissolve the resin after hardening.

Experimental Procedure: Five cleaners from the previous trial and three new cleaners were tested. Each cleaner was used at full strength at room temperature.
Approximately 3 grams of the resin was placed into a 40 mL vial. Twenty mL of each cleaner was poured into the vials. The vials were then capped and shaken by hand for 30 seconds. The vials sat for three days. Observations were made after the last day.
SUBSTRATE MATERIAL: N/A
CONTAMINANTS: Formaldehyde Based Resin
CONTAMINATING PROCESS USED: Contaminant placed in a vial.

Results: Table-1 lists the observations made after the third day of soaking.

Table-1. Observations

Cleaner Used	Weight of Resin (g)	Observations
Super CMF 240	2.8010	No dissolving
Daraclean 232	3.1207	Good dissolving
SC -1000	2.6634	Good dissolving
Bio-Safe 1023	2.8000	Some dissolving
HTF -50	3.1096	Some dissolving
HTF-60	2.7271	No dissolving
Resineater	2.8797	No dissolving
D-Limonene	3.0129	No dissolving

Both the Gemtek SC-1000 and WR Grace Daraclean 232 showed any significant dissolving of the resin in the solid phase. The solutions appeared cloudy and the resin appeared as if it was becoming gel-like. The cleaners with some dissolving were partly cloudy and the resin looked solid. Chemistries with no dissolving had no effect on the resin.

Summary:

Substrates:	Liquid				
Contaminants:	Resins/Rosins				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Chrisal USA Inc	Super CMF 240	100	0.00	☐	
Magnaflux	Daraclean 232	100	0.00	☑	
Gemtek Products	SC 1000 Aqueous Cleaner Concentrate	100	0.00	☑	
CSA Inc	Bio Safe 1023	100	0.00	☐	
Tarksol Inc	Tarksol HTF-50	100	0.00	☐	
Tarksol Inc	Tarksol HTF 60	100	0.00	☐	
Finger Lakes Chemical	FLSC-12 Resineater Sample	100	0.00	☐	

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Florida Chemical Company	D-Limonene	100	0.00	☐	

Conclusion: Two chemistries were effective in starting to dissolve the resin after three days at room temperature. Elevated temperatures may increase the rate at which the solutions react with the resin.