# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1998

DateRun: 07/09/1998

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 | | ☐ | |
| Magnaflux | Daraclean 232 | 100 | | ☑ | |
| Gemtek Products | SC 1000 Aqueous Cleaner Concentrate | 100 | | ☑ | |
| CSA Inc | Bio Safe 1023 | 100 | | ☐ | |
| Tarksol Inc | Tarksol HTF-50 | 100 | | ☐ | |
| Tarksol Inc | Tarksol HTF 60 | 100 | | ☐ | |
| Finger Lakes Chemical | FLSC-12 Resineater Sample | 100 | | ☐ | |

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|---|---|---|---|---|---|
| Florida Chemical Company | D-Limonene | 100 | | ☐ | |

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.