CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1999

DateRun: 04/01/1999

Experimenters: Jason Marshall

ClientType: Vessel Cleaning Company

ProjectNumber: Project #2

Substrates:

PartType: Coupon

Contaminants: Adhesive, Resins/Rosins

Cleaning Methods: Immersion/Soak

Analytical Methods: Shake method, Visual

Purpose: Second attempt to find other alternative cleaners for the cleaning of phenolic resin.

Experimental Procedure: Five products were selected for the cleaning trial based on vendor information. Twenty-five milliliters of each cleaner were poured into a 30 mL vial. The contaminant was placed into each beaker. Each vial was covered with the supplied cap and shaken for 30 seconds. Observations were recorded. The shaking and observation cycle was repeated. One sample from the previous trial was heated to 120 F in a hot water bath so that the product could be evaluated at an elevated temperature.
SUBSTRATE MATERIAL: None
CONTAMINANTS: Phenolic based Resin

Results: Savogran HD 34 started to dissolve the contaminant from the paper towel within the first five minutes, which was faster than the previous trials time of 30 minutes. For the rest of the products, no product showed signs of dissolving the contaminant until 2 hours had passed. After sitting for three days, this same cleaner had turned a very dark red, much darker than the HD 34 color. Table 1 lists the observations made at each time interval.

Table 1. Cleaning Observations

Cleaner	HD34 (heated)	Kyzen	Calgon	Gemtek	Brulin	US Polychem
5 minutes	Some dissolving	No dissolving	No dissolving	No dissolving	No dissolving	No dissolving
30minutes	Soft paper	Stiff paper	Stiff paper	Stiff paper	Stiff paper	Stiff paper
1 hour	Yellow/ red	No dissolving	No dissolving	No dissolving	No dissolving	No dissolving
2 hours	Not tested	No dissolving	No dissolving	Some change	No dissolving	No dissolving
3 days	Not tested	No dissolving	No dissolving	Dark red	No dissolving	No dissolving

Summary:

Substrates:						
Contaminants:	Adhesive, Resins/Rosins					
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**	
Savogran Company	HD-34 Cleaner Degreaser	100	0.00	☑		
Kyzen Corporation	Misprint Stencil Remover	100	0.00	☐		
Calgon Corporation	SC 844	100	0.00	☐		
Gemtek Products	SC Supersolve Safety Solvent	100	0.00	☑		
Brulin Corporation	Nature Sol 100	100	0.00	☐		
US Polychem Corporation	87 RB	100	0.00	☐		

Conclusion: Savogran HD 34 was shown to have an increased dissolving rate when heated to 120 F. Gemtek SC Supersolve was also proven to be able to dissolve the resin after a long period of time. This product will be tested with an increased temperature just like HD 34.