CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2007
DateRun:	10/18/2007
Experimenters:	Heidi Wilcox
ClientType:	Wire & Cable Mfr
ProjectNumber:	Project #1
Substrates:	Liquid
PartType:	Part
Contaminants:	Paints, Resins/Rosins
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Tactile, Visual
Purpose:	To screen potential cleaning products for removing paint/resin from steel parts
Experimental Procedure:	Six products from the previous trial were identified for further testing. While all 14 previous products showed potential, products were picked for more extensive testing based on performance, EH&S and possible cost considerations. 100 milliliters of each product at 100% solution were placed in a 200 ml beaker, except Micro 90, a 10 and 20 % solution were used. A small piece of cured paint/resin taken from a supplied bucket of resin and was placed in the beaker. The paint/resin was allowed to sit in the solution to determine what effect the cleaning products would have. Observations were made at 30, 60, 120 and 180 minute intervals as well as overnight. Any signs of interaction between paint/resin and cleaner were recorded.

Results:

Product	Initial Appearance and observations
Micro 90 10%	Clear, resin sinks to bottom of beaker
30 min	No Change
60 min	No Change
120 min	No Change
180 min	No Change
overnight	Resin slightly soft, piece can be pulled apart
EnviroCare Floor	Clear, resin sinks to bottom of beaker
Stripper	
30 min	No Change
60 min	No Change
120 min	Resin slightly softened
180 min	No change
overnight	solution was still clear. The resin was soft and crumbled when touched
Green Solution	Clear, resin sinks to bottom of beaker
30 min	No Change
60 min	No Change
120 min	Resin slightly softened
180 min	No change
overnight	Solution light brown color so some dissolving. The resin was soft and crumbled when touched
Vertrel XP 10	Clear, resin floats
30 min	No change
60 min	No change
120 min	No change

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180 min	Resin slightly softened
Overnight	Solution still clear. Resin was brittle and broke easily
OS 30	Clear, resin sinks to bottom of beaker
30 min	No change
60 min	No change
120 min	No change
180 min	Resin slightly softened
Overnight	Solution still clear. Resin was brittle and broke easily
Microcare MCA	Clear
30 min	No change
60 min	No change
120 min	No change
180 min	Resin slightly softened
Overnight	Solution still clear. Resin was brittle and broke easily

Summary:

Substrates:	Liquid
Contaminants:	Paints, Resins/Rosins

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
International Products Corporation	Micro 90 Conc.	10	0.00	☑	
Rochester Midland Corporation	EnviroCare Floor Stripper	100	0.00	☑	
Spartan Chemical Company	Green Solutions Floor Stripper	100	0.00	☑	
DuPont	Vertrel XP 10	100	0.00	☑	
Dow Chemical Company	OS 30	100	0.00	☑	
DuPont	Vertrel MCA	100	0.00	☑	

Conclusion:

Again, all products showed some promise, but the Rochester Midland and Spartan products showed the most and are some of the top choices in the EH&S and economic categories. These two will be tested further in heated immersion and ultrasonics testing to find the optimum time for cleaning and under what conditions.