CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2005
DateRun:	05/05/2005
Experimenters:	Heidi Wilcox
ClientType:	Wire & Cable Mfr
ProjectNumber:	Project #1
Substrates:	Aluminum
PartType:	Coupon
Contaminants:	Mold Releases, Resins/Rosins
Cleaning Methods:	Ultrasonics
Analytical Methods:	Gravimetric
Purpose:	To evaluate product using ultrasonic cleaning.

Experimental Procedure:

One product was used at full strength heated to 120 F using a hot plate. The product was suspended into a Crest 40 kHz ultrasonic tank filled with water at 120 F. The cleaning solution was degassed for 5 minutes. Three preweighed coupons were first coated with Valspar MR 225 mold release (100-41-4, 1330-20-7, 8052-41-3, 67-63-0, 108-88-3, 110-82-7, 64742-89-8), followed by a second coating with Valspar MR 225 Aerosol (75-28-5, 74-98-6, 100-41-4, 75-09-2). The coupons were placed into a convection oven at 150 F and allowed to cure overnight. After the coupons were cooled to room temperature, Chockfast Orange Resin was applied in a thin strip. A second set of weights were recorded to determine the amount of contaminants were added.

Three coupons were cleaned in the product for five minutes using ultrasonic energy. After cleaning the coupons were removed and dried using compressed air at room temperature. Final weights were to be recorded after coupons were dry. Observations were made and recorded.

Results:

After 5 minutes of cleaning Bio T Max showed some signs of working. The resin lifted off one coupon but not the other two. With more time it may have worked on all three.

Cleaner	Initial wt	Final wt	% Removed
Bio T Max	0.1004	0.0686	31.67
	0.0984	0.0195	80.18
	0.0754	0.0482	36.07
	0.0774	-0.0005	100.65

Summary:

Substrates:	Aluminum
Contaminants:	Mold Releases, Resins/Rosins

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Bio Chem Systems	Bio T Max	100	49.31	☑	

Conclusion:

Bio T Max works on the mold releases but not on the resin at this time and temperature. And increase in either or both may show it an effective resin remover.