CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2014

DateRun: 05/22/2014

Experimenters: Johnny Le

ClientType:

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Resins/Rosins

Cleaning Methods: Immersion/Soak

Analytical Methods: Visual

Purpose: To validate possible VOC compliant for coating removal

Experimental Procedure: Red lacquer- 1 hour testing coated 2 layers. Heat the solutions to 50-60 degree Celsius. Leave coupon immersed for 15 mins then remove to check lacquer. Make sure to keep an eye on the thermometer so it does not go out of the temperature range. Rinse the coupon for 20 seconds. Wipe the coupon dry with a paper towel and take observation on if the lacquer is peeling off or being dissolved in the solution. Repeat at 30 min, 45 min and 60 min. Take a picture when you notice a change in observation.

Results: The first few tests were preliminary tests to get an idea of what methods to use. After a few of these using visual and gravimetric analysis, it was concluded that gravimetric analysis will not be helpful for this test. Thereafter, only visual analysis was used.
Here are the results for none heated immersion testing on cleaners Safecare Maxisolv, Supersolv, and Actisolv. 15 mins (immersion)

The solution for SCMaxisolv turned read after 15 mins immersion. SCActisolv started to turn pink after 15 minutes of immersion but turns back to red after cooling down. Solution for SCActisolv turned orange. 30 mins (immersion)
SC Maxisolv
SCSupersolv
SCActisolv

No changes occurred after 30 minutes of immersion, same observation as 15 minutes. 45 mins (immersion)
SC Maxisolv
SCSupersolv
SCActisolv

SCMaxisolv had dissolved the lacquer by half at 45 minutes immersion and can be peeled off. SCSupersolv could be peeled off manually if some force was applied. SCActisolv started to change towards a paler pink color towards white. It also became softer and has a sticky texture.

Summary:

Substrates:	Aluminum				
Contaminants:	Resins/Rosins				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Gemtek Products	Safe Care (SC) Maxi Solv	100	0.00	☑	
Gemtek Products	SC Actisolv Safety Solvent	100	0.00	☐	
Gemtek Products	SC Supersolve Safety Solvent	100	0.00	☐	

Conclusion: After 60 minutes of no heat immersion, only SafeCare Maxisolv managed to remove the lacquer from the aluminum surface.