CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1998

DateRun: 09/21/1998

Experimenters: Jason Marshall

ClientType: Aluminum Job Shop

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Part

Contaminants: Adhesive, Coatings, Resins/Rosins

Cleaning Methods: Immersion/Soak

Analytical Methods: Scrape Test, Visual

Purpose: To evaluate paint and cleaner compatibility.

Experimental Procedure: The chemistry from the previous trial was placed in a petri dish and heated to 150 F on a hot plate. A sample of each painted-aluminum part was cut into a 1 inch square with metal snips. The pieces were placed into the hot cleaning solution. Observations were made at 15, 30, 60 and 120 minutes. Each observation included visual inspection for obvious paint removal and a scrape test to determine how easily the paint was removed from the aluminum substrate.

SUBSTRATE MATERIAL: Aluminum Parts coated with paint (not to be removed)
CONTAMINANTS: Acrylic Sealant-Aromatic Hydrocarbon (Toluene CAS# 108-88-3)

Results: Table 1 lists the different coated parts and the observations made.

Paint Color	15 minutes	30 minutes	60 minutes	120 minutes
Black	Visual: No paint removal	Visual: No paint removal	Visual: No paint removal	Visual: No paint removal
	Physical: No paint removal	Physical: No paint removal	Physical: No paint removal	Physical: Some paint removal
Brown	Visual: No paint removal	Visual: No paint removal	Visual: No paint removal	Visual: No paint removal
	Physical: No paint removal	Physical: No paint removal	Physical: No paint removal	Physical: No paint removal
Beige	Visual: No paint removal	Visual: No paint removal	Visual: No paint removal	Visual: No paint removal
	Physical: No paint removal	Physical: No paint removal	Physical: No paint removal	Physical:Some paint removal
Green	Visual: Paint Bubbling	NOT TESTED	NOT TESTED	NOT TESTED
	Physical: Lots of paint removed			
White	Visual: No paint removal	Visual: No paint removal	Visual: No paint removal	Visual: No paint removal
	Physical: No paint removal	Physical: No paint removal	Physical: No paint removal	Physical: No paint removal

The brown and green samples did have some of the sealant contaminant on their surfaces. The adhesive on both samples were easily removed after 5 minutes of soaking. Two samples were not affected by the extended soaking (brown and white), while 2 others could withstand a moderate soak time (black and beige) and only 1 sample had almost all of its paint removed after only 15 minutes (green).

Summary:

Substrates:	Aluminum				
Contaminants:	Adhesive, Coatings, Resins/Rosins				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**

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Tarksol Inc	Tarksol HTF-50	100	0.00	☑	

Conclusion: The T-Square HTF 85B was compatible with most of the painted parts supplied to the lab. Only one paint (green) was not compatible.