CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005

DateRun: 04/24/2005

Experimenters: Jason Marshall

ClientType: Textile Mfr

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Part

Contaminants: Coatings, Resins/Rosins, Alcohol, Starch

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: To identify possible cleaning alternatives for resin, starch and pva.

Experimental Procedure: Eight products were selected from the laboratory's database of test results based on client supplied information. Each product was used straight at room temperature (68 F). A small amount of each product was applied to small section of the supplied dirty part. The cleaning solution was allowed to sit for one minute and then wiped off using a hand held swab. Observations were made for each product for the amount of soil removed. A water wipe and dry wipe were also conducted to establish a benchmark for performance.

Contaminant Mix:
Starch - National Starch & Chemical Kofilm 280
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Resin - Eastern Color & Chemical Ecco Resin 8800 (108-05-4, 75-07-0)
Alcohol - Celanese Ltd. Celvol Polyvinyl alcohol (25213-24-5)
Coating - Degussa Corp Dyhard T03 coating additive

Results: All of the products selected appeared to remove more of soil mix than water or dry wiping. Some of the products foamed when the part was wiped with the swab. These products may have less foaming if used at a diluted concentration.

Cleaner	Observation	Rank
Bio T Max	Swab turned brown/ black after wiping	3
DBE 6	Swab was darker than Bio T Max	2
Ionox HC 2	About the same as Bio T Max	4
Micro 90	Less than Bio T Max, foaming	6
Inproclean 3800	About equal to Bio T Max, foaming	5
SC Aircraft & Metal Cleaner	Equal to Micro 90	7
VPW SC 1000	Darkest swab	1
Organic Cleaner/ Degreaser	Least dirt removal, foaming	8
Water	Less than SC Aircraft & Metal cleaner	9
Dry	Very little removal of soil	10

Summary:

Substrates:	Aluminum				
Contaminants:	Coatings, Resins/Rosins, Alcohol, Starch				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Bio Chem Systems	Bio T Max	100	0.00	☑	Rank = 3
Invista S.a.r.l	Flexisolv DBE 6 ester	100	0.00	☑	Rank = 2
Kyzen Corporation	Ionox HC 2	100	0.00	☑	Rank = 4
International Products Corporation	Micro 90 Conc.	100	0.00	☑	Rank = 6

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Oakite Products	Inproclean 3800	100	0.00	☑	Rank = 5
Gemtek Products	SC Aircraft & Metal Cleaner Super Concentrate	100	0.00	☑	Rank = 7
Orison Marketing	VPW SC 1000	100	0.00	☑	Rank = 1
1st Envirosafety Inc. - No Longer Exists	Organic Cleaner/Degreaser - For Comparison Purposes Only	100	0.00	☐	Rank = 8

Conclusion: Each product showed signs of removing the soil after a short contact time. Further testing on supplied parts should be conducted to verify performance under conditions similar to operating conditions. Testing can be conducted when more parts are sent to the lab.