CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2009

DateRun: 09/27/2009

Experimenters: Jason Marshall, Junhee Cho, Khoa Pham

ClientType: Cleaning Equipment Mfr

ProjectNumber: Project #1

Substrates: Wood

PartType: Coupon

Contaminants: Inks

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: To evaluate supplied equipment for white board cleaning as compared to conventional products.

Experimental Procedure: A red Expo dry erase marker color was used to color in a 4 inch square section of a white board. The red square was then aged accelerated by using a Master Appliance heat gun operating at the low setting (300 F) from 8-9” above the surface. This resulted in a surface temperature around 170 – 190 F. The heat was applied for 5 minutes.

After aging, the marker was wiped from the surface with a single pass using a dry paper towel. Then the cleaning product was applied to surface (2-3 sprays or 2-3 seconds of delivery). The wet surface was then wiped using a fresh white paper towel and cleaned for a maximum of 30 seconds. A second application of cleaner was delivered only if the surface becomes dry during the wiping. Visual observations were made of the white-board and the paper towel to determine how effective the cleaning product was. The procedure was repeated for a total of three sections of the white board. Products were ranked against the others by at least three staff members.

Results: Based on visual observations by a panel of three lab staffers, all three products removed a portion of the aged dry erase marker from the white board using a paper towel. No product removed all of the ink. The conventional product made by the same company that makes the markers had the most removal followed by isopropyl alcohol. The Activeion had the least amount of dry ink removal. Rankings are listed in the table below. Pictures of the surfaces cleaned are included along with the used paper towels.

Product	Ranking A	B	C
Activeion	3	3	3
Expo	1	1	1
IPA	2	2	2

Summary:

Substrates:	Wood				
Contaminants:	Inks				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Activeion Cleaning Solutions LLC	Activeion Pro	100	0.00	☑	
Sanford Brands	Expo	100	0.00	☑	
Fisher Scientific	Isopropanol a459-4 70% VV (CAS:67-63-0)	100	0.00	☑	

Conclusion: The Activeion unit did remove residue from the aged dry erase ink on the white board. Levels removed were less than the conventional product.