CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2011

DateRun: 05/22/2011

Experimenters: Jason Marshall, Junhee Cho, Johnny Le

ClientType: General

ProjectNumber: Project #1

Substrates: Plastic

PartType: Coupon

Contaminants: Dirt

Cleaning Methods: Manual Wipe

Analytical Methods: Visual, Timing

Purpose: To evaluate the efficacy of cleaner for dust removing with microfiber.

Experimental Procedure: Several cleaning products and water were selected based on the client supplied information about current dusting practices. All cleaning products were used at 2.4 % and water was used at full strength. To simulate the dust, the lab created a mixture of AATCC synthetic carpet soil and white flour in the ratio of 1:2. A small portion, 0.4 g, of this artificial dust soil was distributed evenly across a white plastic tray (16"x14") with roller. Once soiled, a cloth was sprayed with a cleaning solution and wiped across the surface to remove the soil. After the cleaning procedure, observations were made to rank cleaners based on visual analysis.

Visual observation included:
1)Measuring the cleaning time
2)Measuring the frequency of wipe
3)Estmiating the amount of remaining dust on surface
4)Estimating the amount remaining dust on microfiber

Results: All cleaners showed over than 90% removal of the contaminant. The table below shows the amounts of soil was removed by each cleaning solution. The current product, Neutral Disinfectant had the best performance but the other products were comparable in performance without a significant increase in cleaning times.

Cleaner	Time (sec)	No. wipes	Dust Remaining(%)	Dust on microfiber (rank)
TMI Neutral Disinfection	30	5	Over 95%	1
DFE 401	30	5	90~95%	2
PC 220	49	6	Over 95%	4
PC101	40	6	Over 95%	2
Water	28	5	90~95%	5
Dry wipe	36	7	85~90%	6

Summary:

Substrates:	Plastic
Contaminants:	Dirt

Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Next-Gen Supply Group	PC 101 Neutral and Glass Cleaner	2.4	0.00	☑	
Next-Gen Supply Group	PC 220 Peroxide Multipurpose Cleaner	2.4	0.00	☑	
Rochester Midland Corporation	DFE 401	2.4	0.00	☑	
Water	Water	100	0.00	☐	

Conclusion: TMI Neural Disinfection is the most effective cleaner in test, but the effectiveness was not significantly different than other cleaners. All four cleaners were good enough to remove the dust on surface.