CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016

DateRun: 03/30/2016

Experimenters: Luis Raudales, Carla De La Cruz, Abigail Giarrosso, Sabrina Apel

ClientType:

ProjectNumber: Project #1

Substrates: Textile

PartType: Coupon

Contaminants: Odor

Cleaning Methods: Low Pressure Spray

Analytical Methods: Smell

Purpose: To evaluate odor elimination from athletic equipment

Experimental Procedure: To determine the best odor eliminating product out of a selection of 4 cleaners, Febreeze, Funk Away, Sweat X, and Aquavert.

The items were first smelled and ranked in order of best to worst smelling. The items were divided into sections for which each cleaner would be used. The cleaner was smelled to know its scent and then applied to the items. Each experimenter took turns smelling and determining whether the odor had been covered. If the odor persisted more cleaner was applied, until it was completely covered. The same procedure took place on the 2nd and 3rd day.

Results:

		Initial Ranks of Odor by experimenter				Number of applications		
Substrate	Cleaner	A	B	C	D	Day 1	Day 2	Day 3
Pad	Funkaway	5	2	5	5	3	1	
	Sweat X					2	1	1
	Aquavent					4	2	
	Febreeze					1		
Hat	Funkaway	2	3	2	2	1		
	Sweat X					2		
	Aquavent					1		
	Febreeze					2		1
Footcover	Funkaway	3	4	4	4	2	1	1
	Sweat X					3	1	
	Aquavent					3	1	
	Febreeze					1	2	
Boxing glove	Funkaway	1	1	1	1	4	3	
	Sweat X					3		
	Aquavent					4		
	Febreeze					3	3	
Boxing helmet	Funkaway	4	5	3	3	2		
	Sweat X					1	1	
	Aquavent					2		
	Febreeze					1		

Observations

Substrate	Cleaner	Observations
Pad	Funkaway	
	Sweat X	Leaves white residue, smell cleaner
	Aquavent	Odor returns
	Febreeze	Smelled of chlorinated water
Hat	Funkaway	Best smell
	Sweat X	Leaves smell of cleaner
	Aquavent	

CLEANING LABORATORY EVALUATION SUMMARY

	Febreeze	Easy to soak fabric
Footcover	Funkaway	Odor returned after sometime
	Sweat X	Rubber smell, persistent odor
	Aquavent	
	Febreeze	
Boxing glove	Funkaway	
	Sweat X	Leaves rubber scent, persistent odor
	Aquavent	
	Febreeze	Odor hard to rid of
Boxing helmet	Funkaway	Odor hard to rid of
	Sweat X	Rubber smell after application
	Aquavent	Persistent odor
	Febreeze	

Legend

	Cleaner Ranking:
Best	1-Febreze
	2-Funk Away
	3-Sweat X
Worst	4-Aquavent

Summary:

Substrates:	Textile				
Contaminants:	Odor				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Procter & Gamble	Febreze Free Nature	100	0.00	☑	Rank 1
Market Ready	Funkaway	100	0.00	☑	Rank 2
Renegade Brands LLC	SweatX Odor Eliminator	100	0.00	☐	Rank 3
Aquavert Clean Co.	Aquavert Multi Purpose Sanitizer	100	0.00	☐	Rank 4

Conclusion:

The cleaners were found to work quite effectively, some better than others. The Febreeze was the best, perhaps because it was the best smelling, and it gave the sense that it had really eliminated the odor from the substrate. There was one instance where the odor came back--for the hat--on the third day although it was covered the second day. The least effective had to be Aquavent, also in part due to its scent. It somewhat smelled like chlorinated water, probably leading to the assumption that the odor was instead replaced by another smell. When compared, Funk Away and Febreeze, head-to-head on the most prominent smelling item, which was the glove, they did almost the same. Although, it took Funk Away 4 sprays the first day in comparison to 3 for Febreeze. They both required 3 sprays to cover the smell the second day and the odor did not return the third day for either.