CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2022

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Experimenters: Zoe Lawson, Tatyanna Moreland Junior, Alexander Symko

ClientType:

ProjectNumber: Project #3

Substrates: Textile

PartType: Coupon

Contaminants: Odor

Cleaning Methods: Mechanical Agitation

Analytical Methods: Smell

Purpose: Determining the Efficacy of Funkaway 4 in 1 (A), Tide Sport (B), and Hex performance (C) laundry detergent on eliminating sweat malodor on pre-soiled athletic wear t-shirts

Experimental Procedure: Pre-soiled athletic-wear shirts were gathered and designated by color. A Purple (P) Green (G) and Red (R) shirts were used. The standard procedure for malodor elimination tests were used, with 3 panelists rating the odor on a scale from 1 to 5. With 1 representing no malodor and 5 representing maximum malodor. Malodor measurements were taken prior to washing, after washing and prior to drying, after drying, and 24 hours after drying. Approximately one tablespoon of detergent was used in the on-site washer unit, and each shirt was individually allowed to tumble-wash for 15 minutes. After measurements, all three shirts were put into an on-site consumer dryer and allowed to tumble dry for approximately 45 minutes. The shirts were measured for malodor following drying, then allowed to sit overnight before being measured a final time.

Results: The Funk Away 4 in 1 had the worst score after washing, but the best score after drying and after 24 hours. Tide Sport and Hex Performance were tied with the best score after washing (1.5), but both got significantly worse after drying; Tide Sport had an average score of 2.2, and Hex Performance had an average score of 2.7. However, Tide Sport stayed consistent after 24 hours with an average score of 2.2. Hex Performance got worse with time and averaged a score of 3.0 after 24 hours. The average of all scores for washing, drying, and after 24 hours for each product put Funk Away 4 in 1 as the most effective with an average of 2.0, Tide Sport in second with an average score of 2.1, and Hex Performance as the least effective with an average score of 2.4.

Treatment	Cleaner	Shirt	Panelists			Average Score
			I	*II*	*III*	
Before Wash (Initial)	A	P	5	5	5	5
	B	G	5	5	5	5
	C	R	5	5	5	5
After Wash	A	P	3	2.5	3	2.8
	B	G	1.5	1.5	1.5	1.5
	C	R	1	2	1.5	1.5
After Dry	A	P	1	2	1.5	1.5
	B	G	1.5	3	2	2.2
	C	R	2	3	3	2.7
After 24 hrs (Final)	A	P	2	2	2	2.0
	B	G	2.5	2	2	2.2
	C	R	3	3	3	3.0

Summary:

Substrates:	Textile				
Contaminants:	Odor				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Market Ready	Funk Away 4 in 1 Laundry Detergent	100		☑	Final average rating of 2.0
Procter & Gamble	Tide Sport	100		☑	Average rating of 2.1
Hex Performance	Hex Performance Laundry Detergent	100		☑	Average rating of 2.4

Conclusion:

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Based on the overall average score, Funk Away 4 in 1 proved to be the most effective with an overall average of 2.0. Tide Sport was second with an average score of 2.1, and Hex Performance was the least effective with an average score of 2.4.