CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2020
DateRun:	01/20/2020
Experimenters:	Kevin Smith, Othon Pagounes, Tuan Le, Harry Rankin
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Skin
PartType:	Coupon
Contaminants:	Dirt
Cleaning Methods:	Manual Wipe
Analytical Methods:	Visual
Purpose:	To evaluate supplied products for performance following Green Seal GS 41 hand cleaning standard.
Experimental Procedure:	The testing conducted followed Green Seal's GS 41 standard, Performance testing Hand Cleaners and Hand Soaps Used for Industrial and Institutional Purposes. The product specific performance requirements stated: Using a fixed, repeatable procedure, the product shall demonstrate efficacy against a nationally recognized conventional product showing equivalent or better performance. The testing protocol shall include, at a minimum: cleaning ability, lathering/rinsing, and skin condition after use. A standard soil shall be used, and conclusions shall be derived from at least five separate samples. All results, a summary of conclusions and a description of how panelists are chosen shall be submitted. To that end, the TURI Lab established a hand cleaning protocol. The TURI Lab Testing Procedure for Hand Soap Testing followed the procedures listed: Conduct preliminary review of hand condition of subject to characterize skin condition as moist, normal, dry or very dry prior to cleaning. The soil used consisted of 5 grams of Synthetic carpet soil AATCC Test Method 122- and 20-ml tap water. The water and soil were mixed together to make a paste. A quarter size amount of soil was applied to a subject's hand. Both hands were then rubbed together to distribute soil to both hands. Using tap water hands were wetted and one pump of hand soap was applied. Hands were rubbed together with soap and water for 20 seconds followed by rinsing hands in tap water for 20 seconds. Final step was to wipe or blot hands dry for 20 seconds. During and after cleaning, observations were made for cleaning, lathering/rinsing and skin condition. Cleaning and lathering observations were made once and the skin condition was recorded at 1, 5, 20 and 60 minutes. Observations were ranked using the following guidelines: Observe cleanliness Rank Cleanliness 1 No signs of soil 2 Only in fine lines of hand or Intermittent spots but not in fine lines 3 Intermittent spots and in fine lines 4 Multiple spots (connected spots) 5 Continually covered Observe lathering/rinsing Rank Lathering/Rinsing 1 Lots of lathering 2 Some lathering 3 Some lathering 4 Little lathering 5 No lathering Observe skin condition after clean/rinse/dry at 1 minute, 5 minutes, 20 minutes and 60 minutes. Rank Skin Condition Observation 1 Smooth and soft 2 Some dryness 3 Dry - Hands turning white 4 Skin stiffening 5 Very dry - Cracking of skin

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Photographs of each subject's hands before soil, after soiling and after cleaning were taken to document cleaning results. Subjects were selected on the basis of skin condition. The goal was to select skin types that were normal to dry so that the effect of the cleaners could be judged on at least two skin types.

Results:

Visual Results and Ratings for Cleanyst Free & Clear Hand Wash Test				
Observation	Tester 1	Tester 2	Tester 3	Average
Cleanliness 1-5	2	2	3	2.3
Lathering 1-5	2	5	4	3.7
Skin Condition				
1 Min	4	2	2	2.7
5 Min	4	3	3	3.3
20 Min	4	4	4	4
60 Min	4	4	4	4

Visual Results and Ratings for Method Free & Clear Hand Wash Test

Observation	Tester 1	Tester 2	Tester 3	Average
Cleanliness 1-5	2	3	2	2.3
Lathering 1-5	2	5	3	3.3
Skin Condition				
1 Min	4	4	3	2.7
5 Min	2	4	3	3
20 Min	4	4	4	4
60 Min	4	4	4	4

Summary:

Substrates:	Skin				
Contaminants:	Dirt				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Cleanyst	Cleanyst Free and Clear Hand Soap	100	0.00	☑	
Method	Method Hand Soap Fall Collection	100	0.00	☐	

Conclusion: The Cleanyst Free & Clear Hand Wash soap was as effective as the Method Free & Clear Hand Wash soap.