CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2014
DateRun:	09/28/2014
Experimenters:	Loc Nguyen, Jonathan Oljey, George Liang, Francisco Abreau
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #5
Substrates:	Skin
PartType:	Coupon
Contaminants:	Dirt
Cleaning Methods:	Manual Wipe
Analytical Methods:	Visual
Purpose:	To evaluate supplied products for performance following the Vi-Jon hand cleaning standard.

Experimental Procedure:

The testing conducted followed Vi-Jon 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 six 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, 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 apply one to two pumps of hand soap were 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
5 Continually covered

Observe lathering/rinsing
Rank Lathering/Rinsing
1 Lots of lathering – easy rinsing
2 Some lathering – easy rinsing
3 Some lathering – hard rinsing
4 Little lathering – easy rinsing/ No lathering – easy rinsing
5 No lathering – hard rinsing

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

Photographs of each subjects 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:

Product	Cleanliness	Lathering/ rinsing	Skin Condition	5 min	20 min	60 min
			1 min			
Vi-Jon Nature Spring	5	1	1	1	1	2
	5	2	2	2	3	2
	4	1	1	1	2	1

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	4	1	1	1	2	2
Method Sea Mineral RTV	3	1	1	1	1	2
	3	3	1	2	2	2
	4	1	1	2	2	2
	4	2	4	4	3	2

Summary:

Substrates:	Skin				
Contaminants:	Dirt				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Vi-Jon	ViJon Natural Spring Hand Soap	100	0.00	☑	C 4.5, L 1.25, S 1.75
Method	Method Sea Mineral Hand Soap	100	0.00	☑	C 3.5, L 2, S 2

Conclusion:

The Method Sea Mineral Hand Soap cleaned more effectively than the Vi-Jon Nature Spring Hand Soup. Considering that when using the Vi-Jon Natural Spring Hand Soap there was a smaller degree of lathering could have been why the results were different. Both soaps left the users with drier feeling skin, with Method Sea Mineral Hand Soap leaving hands feeling slightly drier.