

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021
 DateRun: 07/25/2021
 Experimenters: Nicole Kebler, Adorrah-Le Khan, Justin Kiander, Edward Judge, Anjali Bhagat
 ClientType: Cleaner Manufacturer
 ProjectNumber: Project #2
 Substrates: Skin
 PartType: Coupon
 Contaminants: Dirt
 Cleaning Methods:
 Analytical Methods: Visual

Purpose: To evaluate the effectiveness of handwashing using synthetic dirt soil.

Experimental Procedure: The testing protocol includes cleaning ability, lathering/rinsing, and skin condition after use. One provided tablet was completely dissolved in a hand pump bottle in warm tap water. The soil used consisted of five 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 for 20 seconds.

Two pumps of supplied hand soap were applied and hands were rubbed together with soap for 20 seconds, followed by rinsing hands in tap water for 20 seconds. The final step was to wipe or blot hands dry for 20 seconds. This was repeated the next day for the comparative soap product to avoid influence from the previous soiling.

During the evaluation observations were made for cleaning and rinsing. 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 Rinsing

- | Rank | Rinsing |
|------|--------------------------------|
| 1 | Easy rinsing - no residue |
| 2 | Easy rinsing - some residue |
| 3 | Hard rinsing - no residue |
| 4 | Hard rinsing - some residue |
| 5 | Hard rinsing - lots of residue |

(Easy rising requires very little hand scrubbing. Hard rinsing required lots of scrubbing or extended time to remove all soap residue)

Observe skin condition after clean/rinse/dry at 1, 5, 20 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 |

Results: Handsoaps:
 A) Amazon Aware Foaming Hand Soap (one tablet)
 B) Method Hand Soap
 C) Amazon Aware Foaming Hand Soap (two tablets)

Hand Soap	Participants	Clean Rating	Rinse Rating	Skin Condition Rating

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				1 Minute	2 Minutes	20 Minutes	60 Minutes
A	1	2	2	1	1.5	1.5	1.5
	2	3	1	1	1	1.5	1.5
	3	4	1	1	1	1	1
	4	2.5	1	1	1	1.5	1.5
	5	3	1	1	1	1	1
B	1	1	1	1	1	1.5	1.5
	2	3	1	1	1.5	1.5	1.5
	3	1	1	1	1	1	1
	4	1	1	1	1.5	1.5	1.5
	5	1.5	1	1	1	1	1.5
C	1	3	2	1.5	1.5	2	2
	2	3.5	2	1	2	2	2
	3	2	2	1	2	2	2
	4	3	2	1.5	2	2	2
	5	3.5	4	1.5	1.5	1.5	1.5

Summary

Hand Soap	Average Clean Rating	Average Rinse Rating	Skin Condition Averages			
			1 Minute	5 Minutes	20 Minutes	60 Minutes
A	2.9	1.2	1	1.1	1.3	1.3
B	1.5	1	1	1.2	1.3	1.4
C	3	2.4	1.3	1.8	1.9	1.9

Participants observed that Amazon Aware Foaming Hand Soap using one tablet left soil in fine lines of hands and did not remove as much as Method Hand Soap. An additional test with Amazon Aware Foaming Hand Soap using two tablets did not improve cleanliness and left a residue on the participant's hands after rinsing and drying. The Amazon Aware Foaming Hand Soap with one tablet and Method hand soap were both reported to have an easier rinse step, no residue, and improved smooth skin condition compared to Method Hand Soap. Two tablets were reported to cause the participant's hands to feel dry after cleaning.

Summary:

Conclusion: Amazon Aware Foaming Hand Soap using one tablet and when used with two tablets were not as effective Method Hand Soap.