

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2000

DateRun: 05/19/2000

Experimenters: Jason Marshall, John Brunelle

ClientType: Consultant

ProjectNumber: Project #1

Substrates: Ceramics, Glass/Quartz

PartType: Coupon

Contaminants: Dirt, Fingerprints, Films, Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: To compare current tub & tile cleaners (Ecolab) with proposed new cleaners (Rochester Midland).

Experimental Procedure: The new products to be compared were diluted to 4 oz cleaner in one gallon of water (approximately 3% by volume) for the Rochester Midland Washroom Fixture Cleaner, 8 oz cleaner in one gallon (approx. 6.25%) for the RM Tough Job, and 4 oz in one gallon (6.25%) for the RM glass cleaner, using DI water. The solution was put in a one quart plastic spray bottle, similar to the supplied for the current cleaning solution.

The contaminant solution was applied to the appropriate surface material, ceramic tub tiles, marble, or glass/mirror. The tiles were allowed to sit for five minutes before cleaning took place. Observations were made by SCL Staff member to determine what the baseline level of contamination looked like. After recording the sets of observations separately, the cleaning process was started. Cleaning involved spraying the tile with one spray, then wiped until clean with cloth rags. The spraying and wiping was performed by the same individual for all tiles and cleaners to ensure consistent cleaning. During the wiping, observations were made as to how easy the cleaning felt. After all tiles were cleaned, final clean observations were made by the same staff member. One tile was cleaned for each solution to be evaluated. The cleaning products were ranked according to all observation made during the entire trial.

SUBSTRATE MATERIAL: Marble Tile, Ceramic Tiles, Glass/Mirror

CONTAMINANTS: L-Gilchrist & Soames Skin Care soap with aloe vera(bar), L-Gilchrist & Soames Soap (bar), Colgate Fluoride Toothpaste, FRIZZ-EASE hair spray, Colgate foam shaving cream.

CONTAMINATING PROCESS USED: Formulated mixture of water, L-Bar soap, toothpaste, and foam shaving cream. The mix was applied using a swab. Hair spray was then applied to surface and allowed to dry.

Results:

| Company | Product | Surface | Evaluation |
|-------------------|-----------------------------|--------------|---|
| Ecolab | Oasis 499 Germicidal | Ceramic Tile | Easily cleaned, little streaking, surface shiny |
| Ecolab | Oasis 266 All Purpose | Ceramic Tile | Moderate effort, some streaking, surface shiny |
| Ecolab | Oasis Tub & Tile | Ceramic Tile | Easily cleaned, little streaking, surface shiny |
| Rochester Midland | EnviroCare Washroom Fixture | Ceramic Tile | Easily cleaned, some streaking, surface shiny |
| Rochester Midland | EnviroCare Tough Job | Ceramic Tile | Easily cleaned, little streaking, surface shiny |
| DI Water | DI Water | Ceramic Tile | Moderate effort, some streaking, surface shiny |
| Ecolab | Oasis 499 Germicidal | Marble | Easily cleaned, little streaking, surface shiny |
| Ecolab | Oasis 266 All Purpose | Marble | Moderate effort, some streaking, surface shiny |
| Ecolab | Oasis Tub & Tile | Marble | Difficult to clean, surface streaky and spotted |
| Rochester Midland | EnviroCare Washroom Fixture | Marble | Easily cleaned, little streaking, surface shiny |
| Rochester Midland | EnviroCare Tough Job | Marble | Easily cleaned, little streaking, surface shiny |
| DI Water | DI Water | Marble | Moderate effort, some streaking, surface shiny |
| Ecolab | Oasis 255 SF Glass | Glass/Mirror | Easily cleaned, little or no streaking |
| Rochester Midland | Envirocare Glass Cleaner | Glass/Mirror | Moderate effort, leaves visible streaks |

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|-------------------|-----------------------------|--------------|-----------------------------------|
| Rochester Midland | EnviroCare Washroom Fixture | Glass/Mirror | Moderate effort, little streaking |
|-------------------|-----------------------------|--------------|-----------------------------------|

Summary:

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|-------------------------------|--------------------------|----------------------------------|--------------------|-------------------------------------|----------------------|--|
| Substrates: | | Ceramics, Glass/Quartz | | | | |
| Contaminants: | | Dirt, Fingerprints, Films, Soaps | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: | |
| Rochester Midland Corporation | Washroom Cleaner | 3 | | <input checked="" type="checkbox"/> | marble and ceramic | |
| Rochester Midland Corporation | EnviroCare Tough Job | 6 | | <input checked="" type="checkbox"/> | marble and ceramic | |
| Rochester Midland Corporation | EnviroCare Glass Cleaner | 6 | | <input type="checkbox"/> | glass | |
| EcoLab | Oasis 499 | 100 | | <input type="checkbox"/> | marble and ceramic | |
| EcoLab | Oasis All Purpose | 100 | | <input type="checkbox"/> | marble and ceramic | |
| EcoLab | Oasis 255 Glass Cleaner | 100 | | <input checked="" type="checkbox"/> | glass | |

Conclusion:

For the marble and ceramic tile surfaces, the RM products were found to be at least as effective as the Ecolab cleaners. For the glass/mirror surface, the Ecolab cleaner out performed the RM cleaners.