

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2009

DateRun: 06/08/2009

Experimenters: Jason Marshall, Junhee Cho, Timothy Weil

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Glass/Quartz

PartType: Coupon

Contaminants: None

Cleaning Methods:

Analytical Methods: Timing

Purpose: To evaluate aerosol dust mop treatment products for vertical adhesion to glass surface

Experimental Procedure: A large glass window was cleaned using Green Works Glass Cleaner from Clorox to ensure uniform clean surface. Once dry each of the test aerosol products were sprayed for 1-2 seconds onto the surface. A timer was started to determine the time the cleaner took to travel 1 foot (30 cm). A second observation was made to see how much movement was achieved for the products for a total of 2 minute. At the end of 2 minutes the distance traveled by the product was recorded.

For products that need more than 1 minute to travel the 30 cm, time will be recorded as greater than 2 minutes and receive a score of excellent. For products that run down the entire length of the window (4 feet) in less than the 2 minutes, the distance will be recorded as greater than 4 feet and will receive a score of poor.

| Time rating | |
|-----------------|-----------|
| 120 | Excellent |
| 60 | Good |
| 30 | Okay |
| 15 | Fair |
| <15 | Poor |
| Distance rating | |
| <1 | Excellent |
| 1 | Good |
| 2 | Okay |
| 3 | Fair |
| 4 | Poor |

| Results: | Product | Time for 1 foot | Rating | Distance in 2 minutes | Rating | |
|----------|-----------------------------------|-----------------|--------|-----------------------|--------|-----|
| | A00811 | > 2 min | 1 | 8.25 | 2 | |
| | | > 2 min | 1 | 5.25 | 1 | |
| | | > 2 min | 1 | 5.5 | 1 | |
| | Product Average | | 1.0 | | 1.3 | 1.2 |
| | A00810 | > 2 min | 1 | 0.5 | 1 | |
| | | > 2 min | 1 | 4.25 | 1 | |
| | | > 2 min | 1 | 4.75 | 1 | |
| | Product Average | | 1.0 | | 1.0 | 1 |
| | SPARTAN DUST MOP/ CLOTH TREATMENT | > 2 min | 1 | 0 | 1 | |

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| | | | | | |
|----------------------|--------------|-----|------|-----|-----|
| | > 2 min | 1 | 3.5 | 1 | |
| | > 2 min | 1 | 0 | 1 | |
| Product Average | | 1.0 | | 1.0 | 1 |
| CLAIRE DUST UP | 43 sec | 3 | 19 | 3 | |
| | 1 min 27 sec | 2 | 13 | 3 | |
| | > 2 min | 1 | 5.5 | 1 | |
| Product Average | | 2.0 | | 2.3 | 2.2 |
| SWIFFER DUST N SHINE | > 2 min | 1 | 0.25 | 1 | |
| | > 2 min | 1 | 0.75 | 1 | |
| | > 2 min | 1 | 0 | 1 | |
| Product Average | | 1.0 | | 1.0 | 1 |

Summary:

| | | | | | |
|--------------------------|---|---------------|--------------------|-------------------------------------|----------------------|
| Substrates: | | Glass/Quartz | | | |
| Contaminants: | | None | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Amrep Inc | Aspire Dust Mop Treatment A00811 Aerosol | 100 | | <input checked="" type="checkbox"/> | Rank = 4 |
| Amrep Inc | Misty Dust Mop Treatment A00810 Aerosol | 100 | | <input checked="" type="checkbox"/> | Rank = 1 |
| Spartan Chemical Company | Dust Mop-Dust Cloth Treatment Aerosol | 100 | | <input checked="" type="checkbox"/> | Rank = 1 |
| Claire Manufacturing | Dust Up Floor Dressing & Dust Mop Treatment Aerosol | 100 | | <input checked="" type="checkbox"/> | Rank = 5 |
| Procter & Gamble | Swiffer Dust & Shine | 100 | | <input checked="" type="checkbox"/> | Rank = 1 |

Conclusion:

Three products in the dust mop treatment category received the top score of 1.0 for the vertical cling test. The Amrep Aspire was a close fourth at 1.2.