# CLEANING LABORATORY EVALUATION SUMMARY

| | |
|---|---|
| SCL #: | 2009 |
| DateRun: | 06/07/2009 |
| 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 multi-surface cleaners 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.<br><br>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 | |
|---|---|---|---|---|---|
| A00166 | >2 min | 1 | 9 | 2 | |
| | >2 min | 1 | 5.25 | 1 | |
| | >2 min | 1 | 7.5 | 2 | |
| Product Average | | 1.0 | | 1.7 | 1.3 |
| A00170 | >2 min | 1 | 4.5 | 1 | |
| | >2 min | 1 | 6.25 | 2 | |
| | >2 min | 1 | 7 | 2 | |
| Product Average | | 1.0 | | 1.7 | 1.3 |
| SD-20 | 1 min 12 sec | 2 | 39 | 4 | |
| | | 2 | 48 | 5 | |

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| | | | | | |
|---|---|---|---|---|---|
| | 1 min 9 sec | | | | |
| | 1 min 12 sec | 2 | 48 | 5 | |
| Product Average | | 2.0 | | 4.7 | 3.3 |
| CLAIRE MR. JINX APC | 1 min 12 sec | 2 | 7.5 | 3 | |
| | 1 min 27 sec | 2 | 19 | 3 | |
| | >2 min | 1 | 7.25 | 2 | |
| Product Average | | 1.7 | | 2.7 | 2.2 |
| 409 ANTIBACTERIAL | 8 sec | 5 | 48 in in 37 sec | 5 | |
| | 6 sec | 5 | 48 in in 46 sec | 5 | |
| | 5 sec | 5 | 48 in in 47 sec | 5 | |
| Product Average | | 5.0 | | 5.0 | 5 |

Summary:

| **Substrates:** | Glass/Quartz | | | | |
|---|---|---|---|---|---|
| **Contaminants:** | None | | | | |
| **Company Name:** | **Product Name:** | **Conc.:** | **Efficiency:** | **Effective:** | **Observations:** |
| Amrep Inc | Aspire Heavy Duty Multipurpose Cleaner A00166 Aerosol | 100 | 0.00 | ☑ | Rank = 1 |
| Amrep Inc | Misty All Purpose Cleaner A00170 Aerosol | 100 | 0.00 | ☑ | Rank = 1 |
| Spartan Chemical Company | SD 20 All Purpose Degreaser Aerosol | 100 | 0.00 | ☐ | Rank = 4 |
| Claire Manufacturing | Mr Jinx All Purpose Cleaner Aerosol | 100 | 0.00 | ☑ | Rank = 3 |
| Clorox Company | Formula 409 All Purpose Cleaner | 100 | 0.00 | ☐ | Rank = 5 |

Conclusion: The two Amrep products in the multi-surface cleaner category had the best performance for vertical cling have good to excellent scores.