CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2009

DateRun: 06/04/2009

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 glass/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.

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: All but one product (Windex), had good to excellent vertical cling as determined by the length of time needed to travel one foot and how far the sprayed product traveled in 2 minutes. The table lists the time and distances for each product.

Product Class	Product	Time for 1 foot	Rating	Distance in 2 minutes	Rating
Glass	A00122	2 min	1	12	2
		> 2 min	1	7	1
		> 2 min	1	4.5	1
	Product Average		1		1.3
	A00124				
	Product Average				
	3M GLASS CLEANER	1 min	1	19.5	2

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		36 sec			
		1 min 29 sec	1	20	2
		1 min 37 sec	1	16	2
	Product Average		1		2.0
	SPARTAN GLASS CLEANER	>2 min	1	9	1
		>2 min	1	3	1
		2 min	1	12	2
	Product Average		1		1.3
	CLAIRE GLEME	>2 min	1	10.5	2
		>2 min	1	10.5	2
		1 min 55 sec	1	14	2
	Product Average		1		2.0

Summary:

Substrates:	Glass/Quartz
Contaminants:	None

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Amrep Inc	Aspire Glass & Surface Cleaner A00122 Aerosol	100	0.00	☑	Rank = 1
Amrep Inc	Misty Heavy Duty Glass Cleaner Aerosol	100	0.00	☐	Rank = 5
3M	3M Glass Cleaner Aerosol	100	0.00	☑	Rank = 3
Spartan Chemical Company	Glass Cleaner - Aerosol	100	0.00	☑	Rank = 1
Claire Manufacturing	Gleme Glass Cleaner Aerosol	100	0.00	☑	Rank = 3
SC Johnson & Son Inc	Windex Glass & More Cleaner (Spray)	100	0.00	☐	Rank = 6

Conclusion: Amrep Aspire and Spartan had the top performing products for glass cling testing.