CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2021
DateRun:	02/09/2021
Experimenters:	Ross Goding
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Glass/Quartz, Chrome
PartType:	Coupon
Contaminants:	Dirt
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric, Visual
Purpose:	The purpose of this project is to test SAAFH Window and Solar cleaner for the removal of AATCC carpet soil from Glass and Chrome Plated Aluminum.

Experimental Procedure:

A total of 18 coupons were obtained and used for this test. 6 coupons were used for each of the 3 cleaners. 9 coupons in total for each substrate, substrates being glass and chrome plated aluminum. The initial weights of the tiles were taken in order to use it as a standard and also determine how much soil was removed after cleaning. The coupons were then soiled with 1 gram of AATCC Carpet soil and baked in an oven at 75 degrees Celsius for 4 hours. These coupons were then removed after the 4 hours and dried overnight. Dried dirty weights were then recorded. The specified cleaners were then used to test cleaning effectiveness on the chrome plated aluminum surface and the glass surface. Each set of 3 coupons (per substrate) were placed in the SLW machine and washed. Two sprays of cleaner were applied to the wypal and two sprays of cleaner was applied to each dirty coupon. The SLW cleaned for 20 swipes (down and back is 1) before removed the set and moving onto the next set of coupons. After all coupons were cleaned with their respective cleaners, they air dried for an hour before final weights were taken and recorded. Effectiveness of the cleaners was then calculated and recorded.

Cleaners Used:

A. SAAFH Window and Solar

B. Windex

C. Krud Kutter 1%

Substrates Used:

1. Glass
2. Chrome

Results:

1% Krud Kutter had the highest percentage removal on Glass and on Chrome, 98% for Glass and 95% on Chrome. Next, Windex also had 98% removal on Glass but had the lowest average at 92% on Chrome. Lastly, the SAAFH Window and Solar cleaner was effective for the removal of carpet soil on both substrates and had a 93% removal on glass and 94% removal on Chrome. It worked just as well as the comparative products.

Cleaner	substrate	initial wt. of cont.	final wt. of cont.	% Removed	average % Removed
A	1	0.3710	0.0189	94.91	93.45
		0.7143	0.0183	97.44	
		0.4442	0.0533	88.00	
	2	0.4895	0.0225	95.40	93.99
		0.4391	0.0312	92.89	
		0.3574	0.0226	93.68	
B	1	1.0332	0.0156	98.49	97.90
		1.0106	0.0170	98.32	
		0.9402	0.0291	96.90	
	2	0.3625	0.0216	94.04	92.56
		0.6734	0.0288	95.72	
		0.2295	0.0277	87.93	
C	1	0.9022	0.0191	97.88	97.80
		0.9946	0.0233	97.66	
		0.9110	0.0194	97.87	
	2	0.7670	0.0244	96.82	94.78

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		0.3105	0.0200	93.56	
		0.5206	0.0315	93.95	

Summary:

Substrates:	Glass/Quartz, Chrome
Contaminants:	Dirt

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Sustainable Tech LLC	SAAFH Window and Solar	RTU	0.00	☑	SAAFH Window and Solar cleaner was effective for the removal of carpet soil on both Glass and Chrome substrates.
SC Johnson & Son Inc	Windex Glass & More Cleaner (Spray)	RTU	0.00	☑	Windex cleaner was effective for the removal of carpet soil on both Glass and Chrome substrates.
Supreme Chemicals of Georgia	Krud Kutter Window Wash	1%	0.00	☑	Krud Kutter Window Wash cleaner was effective for the removal of carpet soil on both Glass and Chrome substrates.

Conclusion:

Out of the 3 cleaners tested, cleaner C (1% Krud Kutter window wash) had the highest removal rate, with its best surface removal being on glass. All products removed the soil better on glass than on chrome. Cleaner A (SAAFH window and solar) had a 94% removal rating for both substrates and cleaner B (Windex) had a 97% removal rating on glass but at 92% on Chrome. All were effective for the removal of carpet soil on both substrates.