

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2014
 DateRun: 05/29/2014
 Experimenters: Allison Leader
 ClientType: Cleaner Manufacturer
 ProjectNumber: Project #2
 Substrates: Stainless Steel
 PartType: Coupon
 Contaminants: Waxes
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric

Purpose: To evaluate effects of cleaners on painted products for stain removal or cleaning purposes.

Experimental Procedure: Three coupons were placed in a Gardner Straight Line Washability unit. A Kimberly-Clark Wypal reinforced paper towel was attached to the cleaning sled and soaked with 4-6 sprays of cleaning solutions. Each coupon was sprayed 3-5 times with the same cleaning solution. The cleaning unit was run for 20 cycles (~33seconds). At the end of the cleaning, bottom parts of the coupons were wiped once with a dry paper towel. Final weights were recorded, efficiencies were calculated and recorded.

Cleaner	Initial wt	Final wt	% Removed
Moldex_PaintPrep_WaxPencil	0.0060	0.0069	-15.00
	0.0066	0.0092	-39.39
	0.0082	0.0074	9.76
Motsenbocker_WaxPencil	0.0118	0.0037	68.64
	0.0153	0.0070	54.24
	0.0086	0.0029	66.27
TSP_Substitute_WaxPencil	0.0005	0.0049	-880.00
	0.0052	0.0050	3.85
	0.0084	0.0079	5.95
Moldex_PaintPrep_WaxCrayon	0.0116	0.0128	-10.34
	0.0147	0.0117	20.40
	0.0147	0.0140	4.76
Motsenbocker_WaxCrayon	0.0141	0.0080	43.26
	0.0159	0.0083	47.79
	0.0152	0.0107	29.60
TSP_Substitute_WaxCrayon	0.0210	0.0209	0.47
	0.0155	0.0125	19.35
	0.0137	0.0126	8.03

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Conclusion: None of the cleaning products used proved to be effective in the task of removing wax pencil or wax crayon from a stainless-steel surface. This experiment, if repeated, should be done with different cleaning solutions.