

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2023  
 DateRun: 12/10/2023  
 Experimenters: Amelia Wagner  
 ClientType:  
 ProjectNumber: Project #1  
 Substrates: Painted metal  
 PartType: Coupon  
 Contaminants: DCC-17  
 Cleaning Methods: Manual Wipe  
 Analytical Methods: Gravimetric  
 Purpose: To evaluate the effectiveness of the client's degreasing product compared to other degreasing products on the market.

Experimental Procedure: Two products were tested; Formula 409, and KH-7 (client's product). A total of six coupons were used, three per cleaner, were weighed. The coupons were then soiled with DCC-17 soil. About 0.5 grams of the soil was applied to each coupon by using a swab to apply the soil in a line down the center of the coupon. The weight of the soiled coupons were recorded. Three coupons at a time were then placed in the Gardner Straight Line Washability Unit. Wypall cleaning cloths were attached to the cleaning block used for the test. Each Wypall cloth and all coupons received two sprays of the cleaner (2.5 ml total), and the SLW unit was run for 20 cycles (Equivalent to 30 seconds of cleaning). Final weights were taken after air drying at room temperature.

Cleaner	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG
Formula 409	0.1041	0.0015	98.56	97.75
	0.0491	0.0023	95.32	
	0.0809	0.0005	99.38	
KH 7	0.0408	0.0064	84.31	84.76
	0.0861	0.0115	86.64	
	0.0492	0.0082	83.33	

Summary:	<b>Substrates:</b> Painted metal					
	<b>Contaminants:</b> DCC-17					
	<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
	Clorox Company	Formula 409 All Purpose Cleaner	RTU	97.75	<input checked="" type="checkbox"/>	
	KH Lloreda SA	KH 7 Super Degreaser	RTU	84.76	<input checked="" type="checkbox"/>	

Conclusion: Both products were effective in removing DCC17 soil from painted metal, however the Formula 409 did perform better than the KH-7