CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 07/22/2004

Experimenters: Jason Marshall, Heidi Wilcox, Andy Harris

ClientType: Metal Finishing

ProjectNumber: Project #2

Substrates: Aluminum

PartType: Coupon

Contaminants: Coatings

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To evaluate products on a second contaminant

Experimental Procedure: Three products were selected from the previous trial. All products were used as received from the client in 400 ml beakers. All three products were heated to 120 F on a hot plate. Nine preweighed aluminum coupons were coated with client supplied coating, Castrol Industries Rustilo DW 924 (64742-88-7, 64742-95-6, 64741-89-5, 64741-97-5, 64742-53-6, 95-63-6), using a hand held swab and then weighed a second time to determine the amount of soil added. Three coupons were cleaned in each solution for 5 minutes using stir-bar agitation. Coupons were rinsed in tap water for 15 seconds at 120 F, followed by air blow off at room temperature. Once dry, coupons were weighed a final time and efficiencies for each cleaner were calculated.

Results: The same two products that damaged the coupons in the previous trial also caused problems in this trial. The Alkalume removed nearly all of the coating, removing over 99.9%. The table below lists the amount of soil added, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
Ro-Prepp R	0.166	-0.0264	115.9
Cleppo 587A	0.2282	-0.0115	105.04
Alkalume LN	0.1651	0.0014	99.15
	0.1885	-0.0004	100.21
	0.2597	-0.0009	100.35

Summary:

Substrates:	Aluminum				
Contaminants:	Coatings				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
McGean Rohco Inc	Ro-Prepp	100	115.90	☐	
Frederick Gumm Chemical	Clepo 587 A	100	105.04	☐	
McGean Rohco Inc	Alkalume LN	100	99.90	☑	

Conclusion: Only the Alkalume will be tested on the third soil.