CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2026

DateRun: 08/10/2026

Experimenters: Ashar Khan, Evan Hebert

ClientType: Lab

ProjectNumber: Project #17

Substrates: Aluminum

PartType: Coupon

Contaminants: Greases, Oil

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To determine the efficacy of modified alcohol Metalnox M6386 chemistry in removing various industrial soils without the assistance of vacuum vapor degreasing equipment.

Experimental Procedure: Three Aluminum coupons were assigned to each of 2 industrial soils; Hocut 759 oil and Phillips Multiplex FS 220 Grease. Each coupon was weighed using a gravimetric balance and had their initial weights recorded. Each coupon was then soiled with a pea sized amount of the appropriate soil using a swab to spread it across the surface of the coupons. Each coupon was weighed again and had their dirty weights recorded. The coupons were then immersed in a beaker of the Metalnox M6386 modified alcohol with a stir bar set to 100rpm for 5 minutes. Upon removal from the beaker, the coupons were allowed to air dry for 20 minutes before being weighed and having their final weights recorded.

Results:

Soil	Initial wt of cont.	Final wt of cont.	%Cont Removed	% AVG
Hocut 795	0.2070	0.0138	93.33	94.27
	0.2093	0.0134	93.60	
	0.2007	0.0083	95.86	
Multiplex FS 220	0.2041	0.1853	9.21	10.84
	0.1951	0.1721	11.79	
	0.1981	0.1753	11.51	

Summary:

Substrates:	Aluminum				
Contaminants:	Greases, Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Kyzen Corporation	Metalnox M6386		94.27	☑	Not effective on Multiplex FS 220 Grease (10.84%)

Conclusion: The Metalnox M6386 modified alcohol was successful in removing the Hocut 795 oil but was unsuccessful in removing the Multiplex FS 220 Grease.