

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006

DateRun: 08/15/2006

Experimenters: Jason Marshall

ClientType: Metal Working

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Lubricating/Lapping Oils, Oil

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To evaluate one product, successful on second soil, on first soil.

Experimental Procedure: One successful product from the second oil removal was evaluated on the first oil. The product was diluted to 5% in 600 ml beakers using DI water and heated to 130 F on a hot plate.

Three preweighed coupons were coated with US Oil Company US Draw 1517 (petroleum oil) using a handheld swab. Coupons were weighed a second time to determine the amount of oil added. Three coupons were cleaned in each solution for five minutes using minimal stir bar agitation. Coupons were rinsed for 15 seconds in a tap water bath at 120 F and dried using a Master Appliance Heat gun at 500 F for 30 seconds. Once dry coupons were weighed a final time and product efficiencies were calculated.

Results: The product was not very effective at removing the first soil, removing just over 45%.

Product	Initial Wt	Dirty Wt	Final Wt
Mirachem 500	0.2024	0.0914	54.84
	0.1132	0.0681	39.84
	0.1311	0.076	42.03

Summary:

Substrates:	Stainless Steel				
Contaminants:	Lubricating/Lapping Oils, Oil				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Mirachem Corporation	Mirachem 500	5	45.57	<input type="checkbox"/>	

Conclusion: Despite its failure to remove the first oil, the product and Aquavantage 1400 will both be used on the third supplied oil along with the other three effective products.