

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2020  
 DateRun: 07/15/2020  
 Experimenters: Alicia McCarthy, Nicole Kebler  
 ClientType: Metal Working  
 ProjectNumber: Project #1  
 Substrates: Stainless Steel  
 PartType: Coupon  
 Contaminants: Buffing/Polishing Compounds  
 Cleaning Methods: Immersion/Soak  
 Analytical Methods: Gravimetric, Visual

Purpose: The purpose of this experiment was to determine the effectiveness of Liquinox in removing the white buffing compound from stainless steel coupons via heated immersion with a stir bar.

Experimental Procedure: Three stainless steel coupons were obtained and weighed. The white buffing compound soil was applied to the bottom third of the coupons with a swab and a soiled weight was recorded. Coupons were then submerged into a 1% concentration solution of Liquinox at 170°F for five minutes. When the five minutes passed, coupons were air dried, and a clean weight was recorded. Effectiveness of the cleaner was determined.

Cleaner	Initial wt. of cont.	Final wt. of cont.	% Cont. Removed	%AVG
Liquinox	0.0049	-0.0009	118.37	151.92
	0.0034	-0.002	158.82	
	0.0014	-0.0011	178.57	

<b>Substrates:</b>		Stainless Steel			
<b>Contaminants:</b>		Buffing/Polishing Compounds			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Alconox Inc	Liquinox	1%	151.92	<input checked="" type="checkbox"/>	Excess soil was also present on the coupons hence an average removal of over 100%.

Conclusion: The Liquinox at a 1% concentration and temperature of 170°F with a stir bar for agitation was effective in removing the white buffing compound from stainless steel coupons. Soil was removed at an average of 151.92%. Percent removals of over 100% indicate that excess soil from previous experiments was also removed from the coupons.