CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2020

DateRun: 07/16/2020

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.

Results:

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	

Summary:

Substrates:	Stainless Steel				
Contaminants:	Buffing/Polishing Compounds				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Alconox Inc	Liquinox	1%	151.92	☑	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.