CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2022

DateRun: 02/15/2022

Experimenters: Nicole Kebler

ClientType: Metal Working

ProjectNumber: Project #1

Substrates: Carbon Steel

PartType: Part

Contaminants: Oil

Cleaning Methods: Ultrasonics

Analytical Methods: Gravimetric, Visual

Purpose: To evaluate Crystal Simple Green at 10% solution for different time frames.

Experimental Procedure: The pre-soiled parts were weighed for dirty weights. The Crystal Simple Green was heated to 140 F and placed in the ultrasonics tank. The parts were then placed in the ultrasonics tank for 15 minutes, 10 minutes, and 5 minutes, one part for each timeframe. The coupons were taken out and left to dry; once the coupons were dry the clean weights were taken. After clean weights, the coupons were wiped down and weighed for initial weights. Visual observations were also noted.

Results: Crystal Simple Green at a 10% concentration works at all three timeframes. At 15 minutes the coupons were completely clean. At 10 minutes the coupons were clean with minor spotting left on the surface, could have been from pulling the coupon out and oil re-attaching. At 5 minutes the coupons were completely clean and did not have any spotting. All coupons had a 99% or higher removal average.

Cleaner	Time (min)	Initial wt. of cont.	Final wt. of cont.	Average	Notes
Simple Green 10%	15	0.1218	0.0015	98.77	Completely clean
	10	0.1254	0.0006	99.52	Clean with minor spotting
	5	0.1069	0.0006	99.44	Completely clean

Summary:

Substrates:	Carbon Steel
Contaminants:	Oil

Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Simple Green	Crystal Simple Green Industrial Cleaner & Degreaser	10	99.44	☑	

Conclusion: Crystal Simple Green at a higher concentration can be used at a lower timeframe with effective results.