

## CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2021

DateRun: 05/24/2021

Experimenters: Anjali Bhagat

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Hucker's Soil

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric

Purpose: To test the effectiveness of Purple Tiger reformulations.

Experimental Procedure: Ten reformulated Purple Tiger products were created and tested: PT 2021, PT 2021A, AHS, GSC, Conc, Conc A, Conc AL, Conc 10%, Conc A 10%, and Conc AL 10%. Three aluminum coupons were obtained and weighed for each of the reformulation products being tested. Coupons were then soiled with Hucker's soil and allowed to air dry for 2 hours. After 2 hours of aging, a dirty weight was recorded. Coupons were then loaded onto a Gardner-scrub Straight Line Wash unit set to 10 cycles per minute for 20 cycles. Three pumps of cleaner were applied to each of the respective coupons and four pumps of cleaner were applied to the scrubbing blocks. The cleaner was allowed to sit for 30 seconds. Following the 30 seconds of resting, the SLW unit was run to simulate scrub cleaning. Coupons were then removed from the machine and allowed to dry in air for 24 hours. After the drying period, coupons were weighed, and a final clean weight was recorded. Effectiveness of the cleaners was determined.

Results:

Summary:

Conclusion: