

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1998
 DateRun: 05/20/1998
 Experimenters: Jason Marshall
 ClientType: Cutting Fluids Manufacturer
 ProjectNumber: Project #1
 Substrates: Aluminum
 PartType: Coupon
 Contaminants:
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Gravimetric, Visual
 Purpose: Determine compatibility with aluminum

Experimental Procedure: This experiment was performed to determine if the substitute propriety chemical was compatible with aluminum. Three precleaned coupons were weighed to obtain baseline weights. The coupons were placed into a bath of the chemistry. Coupons were separated from each other using wire hooks. Two hooks on the bottom of the container supported the first coupon. Two more hooks were placed on top of this coupon. This was continued for the remaining two coupons. The container was then covered and allowed to sit for 24 hours. Coupons were removed from the chemistry and rinsed with DI water at room temperature for 10 seconds. Parts were dried at room temperature. Final weights were recorded.

Results: RESULTS: Table 1 lists the before and after weights of the aluminum coupons.

Coupon #	Initial Weight (g)	Final Weight (g)
2	21.1203	21.1208
3	21.025	21.0258
8	21.1521	21.1535

From visual inspection and through gravimetric analysis, no signs of etching or weight loss were recorded.

Summary:

Conclusion: The chemistry appears to be compatible with aluminum.