

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005  
DateRun: 06/28/2005  
Experimenters: Jason Marshall  
ClientType: Chemical Company  
ProjectNumber: Project #1  
Substrates: Liquid  
PartType: Coupon  
Contaminants:  
Cleaning Methods:  
Analytical Methods:

Purpose: To measure pH values of solutions with and without boric acid

Experimental Procedure: Initially, the pH of a 7.00 buffer solution was measured using a VWR Scientific Products Model 8000 pH/Temp meter. Values were also recorded for the Union 1760 AU-1 (stock), Union 1760 Residue Remover, DI water, Union 1760 AU-1 (stock) with 0.25g boric acid, Union 1760 Residue Remover with 0.125g boric acid and DI water with 0.25g boric acid that were used for the corrosion test conducted on June 20, 2005. In addition, fresh samples were measured for the two client supplied products with and without boric acid. A fresh DI water sample was measured (but not with boric acid).

The pH probe was allowed to sit in the test solution for 5 minutes to allow the pH value to stabilize. The probe was rinsed with water in between each solution. With all samples tested, the 7.00 buffer solution was measured again.

Results: The pH values decreased with the addition of the boric acid for both the old samples and the fresh samples.

pH taken 6/28/05		
	Containers from testing	Fresh Samples
	6/20/05	6/28/05
Product	pH	pH
UN 1760 Stock	4.27	3.21
UN 1760 Residue Cleaner	4.36	3.97
UN 1760 Stock w/ boric acid	4.06	3.17
UN 1760 Residue Cleaner w/ boric acid	4.24	3.73
DI Water	8.26	5.4
DI Water w/ boric acid	7.75	NT
Initial Buffer		7.02
Final Buffer		6.96

Summary:

Conclusion: The stock solution had a lower pH than the cleaner residue solution. The boric acid decreased the pH for both supplied solutions.