

# Sample collection and storage bottle washing

## Introduction

Clean glassware is the backbone of good research. Improperly cleaned glassware or inappropriate storage containers can contaminate samples and skew results. This protocol illustrates both the proper sample bottle to use dependent upon analysis and how to get the sample bottle ready for the field.

## Equipment Needed

- Milli-Q (MQ) or Nanopure water
- MQ water bath
- 10% HCl bath
- Clean drying area

## Procedure

**Go through the procedure step by step until the terminal step determined by your bottle type.**

1. Clean all glassware with a phosphate free soap to remove any dirt.
2. Rinse with MQ water 5x and place in a MQ bath for 24 hours.
3. Rinse with MQ water 5x.
4. **For DI washed HDPE and amber glass the washing process stops here.**
  - DI washed HDPE should be placed in a clean area to dry.
  - Amber glass should be combusted for 4 hours at 450C.
5. Bottles that are to be acid washed (HDPE and other glassware) should be placed in a 10% HCl bath for 4 to 24 hours.
6. Rinse with MQ water 5x and place in a MQ bath for 24 hours.
7. Rinse with MQ water 1x and let dry in a clean area.

## References

Perdrial, J.N., Amistadi, M.K., LaSharr, K., Lybrand, R., Huckle, D., Pohlmann, M., Maxwell, R., Vazquez-Ortega, A., Zapata-Rios, X., Lau, T., Abramson, N., Guthridge, L., Bernard, D., and Chorover, J. (2013). CZO Lab Handbook (Jemez River Basin).