

PFAS analysis using glass or plastic vials – Tips and Suggestions

In order to take the most accurate accurate analysis of PFAS special care must be taken for storage and sampling.

Glass and also low-density polyethylene (LDPE) materials are not recommended for storing PFAS samples. PFAS can adsorb to glass, particularly when the chemicals are stored in a glass container for extended periods of time.

Recommended vials:

- High-density polyethylene (HDPE) or Polypropylene Containers with HDPE or Polypropylene Caps is the recommended containment for **sampling**.
- Amber Glass Vials are recommended for **Calibration Standards**.
- The use of LC Polypropylene Vials is commonly recommended for the **analysis** of PFAS. *(50% Methanol in Water has been shown as the optimal solution for dissolving PFAS and maintaining them in solution.)*

Recommended caps:

- Sealed replaceable Caps are suggested, as it has been noted the concentrations quantified can be altered as the PFAS chemical can be lost through evaporation via cap puncture as well as the organic solvent. If the solvent is lost through evaporation, the amount quantified may be higher than what is actually measured. PFAS compounds may also evaporate, which would lead to a lower measurement than the actual sample contains. Replacing caps with new sealed tops is the best practice to avoid these variances in quantitation.

Sampling tip: *Vortexing the solution before injection ensures a homogenous solution and optimum results. The recovery of the long-chain PFAS is considerably lower before vortex due to settling in vials.*