

Cleaning Requirements for AS40 Vials and Caps

For analyses requiring low part per billion (ppb) or microgram per liter ($\mu\text{g/L}$) level determinations, the probability of contamination during sample collection and storage is high. Collection vessels, as well as AS40 Automated Sampler vials and caps, should be cleaned prior to use (see instructions below). *Use only caps without filters when performing low-level analyses.*

IMPORTANT

During sample preparation and collection, or when handling clean vials and caps, always wear disposable, powder-free PVC gloves that have been rinsed with deionized (DI) water and air-dried.

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The DI water used in low-level sample analysis should be Type I reagent-grade water with a specific resistance of 17.8 megohm-cm or greater. The DI water should be free of ionized impurities, organics, microorganisms, and particulate matter larger than 0.2 μm .

Cleaning Collection Vessels (for blanks, samples, and standards)

1. Rinse the sample container and cap 3–5 times with DI water. Fill the container until it overflows, cap securely, and soak for 4 hours.
2. Empty the container, refill it with DI water, and cap securely. Soak the container for an additional 24 hours before sample collection.
3. Empty the container and rinse it twice with the sample to be collected. Fill the container with the sample until it overflows, and then cap securely.

Cleaning AS40 Vials and Caps (without filters)

1. Rinse the vials and caps 3–5 times with DI water. Place the vials and caps in a large pre-cleaned plastic container and soak for 4 hours in DI water.
2. Drain (or empty) the container and refill it with DI water. Soak the caps and vials for an additional 24 hours before use.
3. Rinse the vial twice with the sample to be collected. Rinse the cap with the sample to be loaded. Fill the container with the sample until it overflows, and then insert the vial cap.

For additional information about low-level analyses, see *Dionex Technical Note 8*; an electronic copy is provided on the Dionex Manuals and Literature CD-ROM.