About SKC Sample Bags

All SKC sample bags are supplied with fittings. See the following descriptions.

- SKC single fittings (polypropylene, PTFE, and stainless steel) contain within one fitting the following:
  1. a hose/valve for flushing and filling the bag and sealing it off after sampling and
  2. a syringe port with PTFE-lined septum for removing the sample for analysis. Within the single polypropylene Fitting is a port for filling and a port for removing the sample, while the single PTFE and stainless steel fittings contain a single port that is used for all functions.
- Dual-fitted bags contain separate hose/valve and syringe port fittings. The syringe port contains a PTFE-lined septum.

1. Calibrating the Flow Rate

If taking a simple grab sample, the flow rate is not important as long as the bag is not overfilled (see Figure 3). Never fill a bag more than 80% of its maximum volume. If taking a bag sample according to a specific analytical method that specifies a flow rate, calibrate the flow rate using a primary standard calibrator.

Set up the pump following pump operating instructions. If sampling according to a specific method, calibrate the pump flow rate using flexible tubing to connect the pump port to the outlet (suction) port of an external calibrator. Ensure pump has run for 5 minutes before calibrating. Calibrate to the flow rate specified in the analytical method for the chemical of interest. See the pump and calibrator operating instructions for calibrating flow rate.

2. Preparing the Bag

1. Ensure the bag material and fittings are appropriate for the compounds to be sampled (see Bag Stability Report at www.skcltd.com/instructions/1805.pdf) and the application’s temperature range (see bag operating instructions).

2. Flush the bag at least three times with purified air or nitrogen before use.

Note: SKC sample bags are designed for single use only.
Sampling Train — Air Sample Bags

3. Setting Up the Sampling Train —
   See Figures 1 & 2

Attach a piece of PTFE tubing to the hose/valve fitting of the bag. Connect the other end of the tubing to the outlet port or fitting of the pump. Use only PTFE tubing for bag sampling, never use rubber or Tygon® tubing.

4. Sampling

To begin sampling, open the valve on the bag fitting; refer to bag operating instructions. Turn on the pump and note the start time and any other sampling information. Avoid filling a bag more than 80% of its maximum volume (see Figure 3).

5. After Sampling

At the end of the sampling period, turn off the pump and close the valve on the bag fitting. Ensure the valve is sealed securely; refer to bag operating instructions. Note the ending time, remove the bag from the pump, and record pertinent sampling information.

6. Shipping Bag Samples

Sample bags sent to a laboratory for analysis should be packed loosely and padded to minimize the danger of being punctured during shipment. Bag samples should not be shipped by air unless the cargo cabin is pressurised. A significant decrease in barometric pressure may cause sample bags to burst. Do not use bags to collect unstable or highly reactive compounds.