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Preloaded Coated Filters

Cat. No. 225-9031

Operating Instructions

SKC coated filters are shipped preloaded in the cassettes with end plugs and shrink bands in place. No assembly is required; they are ready to use.

Method & Chemical: NIOSH 7906 for particulate fluorides and hydrofluoric acid

Filter & Coating: One uncoated nitrocellulose filter (pre-filter) and one nitrocellulose filter coated with sodium carbonate. Three-piece 37-mm cassette. Closed-face sampling configuration

Prior to Sampling: Store at 71.6 F (22 C) for up to 2 years.

Sample Stability: Store samples at 68 F (20 C) for 7 days and at ≤ 39.2 F (4 C) thereafter for up to 14 days (particulate fluorides) and 28 days (hydrofluoric acid).

SPECIAL PRECAUTIONS: *Acids, particularly hydrofluoric acid, are extremely corrosive to skin, eyes, and mucous membranes. Hydrofluoric acid will attack glass. Plastic labware is recommended. Wear gloves, lab coat, and safety glasses while handling acids. All work should be performed with adequate ventilation for personnel and equipment. It is imperative that acid be added to water to avoid a violent exothermic reaction.*

For information on other available coated filters, go to www.skcinc.com.

How to Use SKC Preloaded Coated Filters

1. Select one coated filter cassette for calibrating the flow rate. A red plug secures the inlet, which is clearly marked “inlet,” and a blue plug secures the outlet. Set up the sampling train for calibration with the representative filter cassette in line. For “closed-face” sampling, remove the plugs and connect the cassette to the sampling train. For “open-face” sampling, remove the outlet plug and the cassette inlet section and then connect the cassette to the sampling train. For details on setting up a sampling train, refer to the SKC Sample Setup Guide “Sampling Train – Filters” at www.skcinc.com/knowledgecenter.
2. Calibrate the pump to the desired flow rate using a calibrator.
3. Replace the cassette used for calibration with a fresh coated filter cassette for sample collection. Attach the cassette to a worker’s collar, as close to the breathing zone as possible, by using a filter cassette holder SKC Cat. No. 225-1. Sample for the specified time interval and record the time.
4. Remove the filter cassette at the end of the specified sampling period and replace both end plugs (and the inlet if necessary). Recheck the flow rate using the same cassette and calibrator used for calibration in Step 2 to ensure that the flow rate has not changed by more than 5%.
5. Remove the filters from the cassette and place them in screw-cap plastic vessels. For the pre-filter portion: with approximately 2 ml eluent (extraction) solution (8 mM Na_2CO_3 /1 mM NaHCO_3), rinse material from the inside surfaces of the pre-filter portion of the cassette into the vessel. Add eluent solution into the vessels until a final volume of 10 ml is reached.
6. Submit at least three blank untreated filters and three blank impregnated filters as field blanks for each set of samples collected per day; place each filter into a vessel and add 10 ml of eluent solution for shipment to the laboratory along with the remaining samples.
7. See *Sample Stability on reverse side for sample storage*. Appropriately package samples, blanks, and all pertinent data to send to a laboratory for analysis.

SKC Limited Warranty and Return Policy

SKC products are subject to the SKC Limited Warranty and Return Policy, which provides SKC’s sole liability and the buyer’s exclusive remedy. To view the complete SKC Limited Warranty and Return Policy, go to skcinc.com/warranty.