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Preloaded Coated Filters
Cat. No. 225-9030 for Hydrogen Peroxide – OSHA 1019
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: OSHA 1019 for hydrogen peroxide

Filter & Coating: 2 quartz filters (R-100) coated with titanium (IV) oxysulfate hydrate ($TiOSO_4$) preloaded in a 25-mm, two-piece polystyrene cassette with no support pad

Prior to Sampling: Store at ≤ 39.2 F (4 C). Limited shelf-life; check expiration date on packaging.

Sample Stability: Store samples at 69.8 F (21 C) or < 39.2 F (4 C) for up to 30 days. Wrap cassettes in foil sheets (provided) to limit exposure to light.

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

How to Use SKC Preloaded Coated Filters

Ensure that filter cassettes are at room temperature before sampling.

1. Select one coated filter cassette for verifying 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 flow rate verification 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 SKC Sample Setup Guide “Sampling Train – Filters” at www.skcinc.com/knowledgecenter.
2. Verify the pump flow rate using a flowmeter.
3. Replace the cassette used to verify flow rate 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 flowmeter used in Step 2 to ensure that the flow rate has not changed by more than 5%.
5. *See Sample Stability on reverse side for sample storage*. Appropriately package filter cassettes and ship the samples, blanks, and all pertinent data 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.

Sampling Train for Hydrogen Peroxide/Peroxyacetic Acid Cat. Nos. 225-9030 and -1345 and either Cat. No. 226-193-UC or 226-199-UC — Non-agency Method 57 Operating Instructions

Method

Non-agency Method 57* for simultaneous sampling of hydrogen peroxide (HP) and peroxyacetic acid (peracetic acid or PAA).

Sampling Media and Train

Follow the method* in assembling the sampling train.

Ensure that filter cassettes are at room temperature before sampling.

1. **Pre-filter Cat. No. 225-9030 collects HP:** 2 quartz filters (R-100) coated with titanium oxysulfate hydrate preloaded in a 25-mm 2-piece polystyrene cassette with no support pad
2. **Tygon Tubing Cat. No. 225-1345 connects pre-filter cassette to sorbent tube:** 1/4-inch ID x 3/8-inch OD
3. **Sorbent Tube Cat. No. 226-193-UC or 226-199-UC collects PAA:**
   Cat. No. 226-193-UC (single section): 7 x 110-mm glass tube containing 800 mg silica gel coated with methyl p-tolylsulfoxide (MTSO) with two glass wool separators
   Cat. No. 226-199-UC (two sections): 8 x 110-mm glass tube containing 800/200 mg silica gel coated with methyl p-tolylsulfoxide (MTSO) with two glass wool separators and a glass fiber filter separating the sections
4. **Tygon Tubing Cat. No. 225-1345 connects sorbent tube to sample pump inlet:** 1/4-inch ID x 3/8-inch OD
5. **Sample Pump capable of maintaining constant flow at 1 L/min** for up to 30 minutes at high back pressures. *SKC recommends the AirChek® Touch Series.*

Flow Rate

A constant flow rate of 1 L/min must be maintained to provide good recoveries of PAA. Lower flows do not allow complete collection of PAA as it has time to react with the coated pre-filter, resulting in underestimated exposure; higher flows typically exceed pump back pressure capabilities.

Storage

Prior to Sampling:

Coated Filter Cat. No. 225-9030 and Sorbent Tubes Cat. Nos. 226-193-UC and 226-199-UC – Store at ≤ 39.2 F (4 C). Limited shelf-life; check expiration date on packaging.

Sample Stability:

Samples on Coated Filter Cat. No. 225-9030 may be stored at 69.8 F (21 C) or < 39.2 F (4 C) for up to 30 days. Wrap cassettes in foil sheets (provided) to limit exposure to light.

Samples on Sorbent Tubes Cat. Nos. 226-193-UC and 226-199-UC may be stored at ≤ 39.2 F (4 C) for up to 3 weeks.

** Peroxyacetic Acid/Hydrogen Peroxide; Annals of Occupational Hygiene, Vol. 48, No. 8 (2004), pp. 715-721*