



Certificate of Quality

Cat. Nos. 226-119 and 226-119-7

Sorbent: Silica Gel coated with

2,4-Dinitrophenylhydrazine

Tube Holder: Type B

Storage: Store at \leq 39.2 F (4 C) before use.

After sampling, store at \leq 39.2 F (4 C).

Expedite shipping of samples to the laboratory. Friday shipments are not recommended.

SKC is an ISO 9001 registered manufacturing company.

For compliance sampling, use these tubes as specified in a validated sampling method. It is the user's responsibility, employing a suitable method, to establish appropriate safety and health practices and to determine the applicability of regulatory limitations before use. It user should adjust the sampling procedures to specific conditions and should test tubes to ensure that the desired results will be obtained.

The SKC Certificate of Quality assures that these sorbent tubes have been manufactured to meet or exceed the requirements for sorbent purity, sample collection and retention, storage stability, and desorption efficiency for the following chemical hazards and analytical methods published by NIOSH, OSHA, EPA, or ASTM:

Acetone	ASTM	D5197
Aldehydes	ASTM	D5197
Aldehydes	EPA	TO-11A
Formaldehyde	ASTM	D5197
Formaldehyde	EPA	IP-6A
Formaldehyde	EPA	TO-11A
Formaldehyde	NIOSH	2016
Glutaraldehyde	NIOSH	2532
Hexanaldehyde (hexanal)	ASTM	D5197

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 http://www.skcinc.com/warranty.asp.



Operating Instructions

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Sorbent Sample Tubes Cat. Nos. 226-119 and 226-119-7

Description

Sorbent sample tubes Cat. Nos. 226-119 and 226-119-7 are two-section tubes containing 300 and 150 mg of DNPH-coated silica gel, respectively. The second section acts as a backup section to detect sample breakthrough.

Sampling

Select Cat. No. 226-119 for flows up to 500 ml/min or Cat. No. 226-119-7 for flows up to 1 L/min. For additional sampling parameters, consult the method used. Sampling parameters may vary with ambient concentrations of the analyte.

These sorbent tubes are not recommended for the collection of acrolein due to numerous problems reported with the instability of the acrolein-DNPH derivative during collection and storage.

Sampling Notes

Ozone: Ozone interference is associated with DNPH-coated adsorbent tubes. Sorbent sample tube Cat. No. 226-120 contains the same sorbent as the 226-119/119-7 tubes but also includes a built-in ozone scrubber for use in atmospheres where ozone is present. The 226-120 tube may be operated at flows up to 1 L/min.

Acetonitrile: The sorbent inside these tubes contains a small amount of residual acetonitrile used in processing the sorbent. Acetonitrile may off-gas during sampling; therefore, exposure monitoring for acetonitrile should **not** be performed concurrently when these sorbent tubes are in use.

Background

See Certificates of Analysis by browsing www.skcinc.com/certificates.asp and scrolling to Silica Gel, DNPH Treated, High Purity. Select the Lot number that matches the Lot number printed on the tube.

Preparing Formaldehyde Samples for Analysis

- 1. Place each sorbent section into separate glass vials.
- 2. Add 3 ml of acetonitrile to each vial. Cap each vial.
- 3. Shake each vial periodically over a 30-minute period.
- 4. Analyze sample extracts by HPLC with UV detection at 365 nm.