

Certificate of Quality



Catalog Number 226-120

Sorbent: Silica Gel coated with

2,4-Dinitrophenylhydrazine with

built-in ozone scrubber

Tube Holder: Type D

Storage: Store in freezer before use.

After sampling, refrigerated storage and shipping to the laboratory required.

SKC is an ISO 9001 registered manufacturing company.

For compliance sampling use these tubes with an accredited sampling method. Such a method does not purport to address all problems, if any, associated with their use. 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. The user should adjust the sampling procedures to meet 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
Formaldehyde	ASTM	D5197
Formaldehyde	EPA	IP-6A
Formaldehyde	EPA	TO-11A
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

863 Valley View Road, Eighty Four, PA 15330 USA Tel: 724-941-9701 Fax: 724-941-1369 e-mail: skctech@skcinc.com

Sorbent Sample Tube Catalog No. 226-120

Description

Sorbent sample tube 226-120 is a three-section tube containing 300 and 150 mg of DNPH-coated silica gel, respectively (sample section and backup section to detect breakthrough) and a 1500 mg section of potassium iodide that acts as an ozone scrubber.

Sampling

The suggested active sampling flow rate is 200 ml/min within a flow range of 100 to 1000 ml/min. *Typical personal sampling pumps may not achieve a flow rate above 600 ml/min with this tube.* For additional sampling parameters, consult the method used. Sampling parameters may vary with ambient concentrations of analyte.

Interferences

Ozone interference is associated with DNPH-coated adsorbent tubes. Sorbent sample tube Cat. No. 226-120 contains a built-in ozone scrubber that may be used in atmospheres where ozone is present to help eliminate this interference.

Sorbent sample tube 226-120 is known to contain the hydrazone derivative of acetone, which may cause interference in the analysis for acrolein. Therefore, SKC does not recommend this tube for acrolein unless the preferred analytical technique resolves this interference.

Preparing Formaldehyde Samples for Analysis

- 1. Place the sample and backup sorbent sections into separate 3-dram glass vials. Discard the ozone scrubber section according to state and federal guidelines.
- 2. Add 3 ml* of acetonitrile to each vial. Cap each vial.
- 3. Shake each vial periodically over a 30-minute period.

Analyzing Formaldehyde Samples

- 1. Analyze sample extracts by HPLC with UV detection at 365 nm.
- 2. Several tubes should be analyzed from the lot to determine background.
- 3. The background must be subtracted from the sample result.
- * 3 ml is the minimum volume needed to achieve good recoveries. Larger extraction volumes may be used, but will result in higher limits of quantitation.