

Sampling Solutions for Formaldehyde

Introduction

Workers in many industries may be exposed to formaldehyde and other aldehydes such as glutaraldehyde and acetaldehyde. Workplace exposure is particularly common in hospitals, medical and veterinary facilities, hair salons, furniture and wood board industries, and garment industries. Exposure to formaldehyde can cause mild to severe health problems. In 2004, the International Agency for Research on Cancer (IARC) classified formaldehyde as a known human carcinogen.



SKC offers active and passive sampling solutions for collecting formaldehyde and other aldehydes for industrial hygiene and environmental applications. SKC active samplers require an air sample pump to collect hazardous gases, vapours, and particulates in air; passive samplers collect hazardous vapours by diffusion without the use of an air sample pump.

SKC Sampling Solutions

For over 50 years, SKC has led the research, design, and manufacture of quality sampling equipment and media to aid health and safety professionals in the evaluation of occupational and environmental hazards.

SKC method-based sampling solutions for formaldehyde and other aldehydes include air sample pumps, active and passive samplers, and filter cassettes following agency methods and established protocols.

Air Sample Pumps



Samplers



Sampling Media



Sample Collection

Active Air Sampling Solutions

Target Compound	Select Methods*	SKC Sample Collection Media and Part No.	SKC Sample Pump and Part No.	Notes
Acetaldehyde	ASTM D5197	Sorbent tube 226-120 or 226-119	AirChek TOUCH 220-5000TC or Pocket Pump TOUCH 220-1000TC	226-120 has ozone scrubber.
	NIOSH 2538	Sorbent tube 226-27		
	NIOSH 2539	Sorbent tube 226-118		Suitable for occupational levels.
	NIOSH 3507	Midget impinger 225-36-2 and impinger trap 225-22		
	OSHA 68	Sorbent tube 226-27		
Formaldehyde	ASTM D5197 EPA TO-11A EPA IP-6A	Sorbent tube 226-119 , 226-119-7 , or 226-120		226-119-7 has a larger outer diameter to reduce pressure drop; 226-120 has ozone scrubber. Suitable for ambient or indoor air.
	NIOSH 2016	Sorbent tube 226-119		AirChek TOUCH offers the option of higher flow rates. This NIOSH method is very sensitive.
	NIOSH 2539 NIOSH 2541	Sorbent tube 226-118		Suitable for occupational levels.
	NIOSH 3500	Two impingers 225-36-1 , trap 225-22 , PTFE filter 225-1709 , and screen 225-26		Most sensitive NIOSH method; best suited for area samples.
	OSHA 52	Sorbent tube 226-54 or 226-117		226-117 for TWAs and 226-54 for STEL sampling.
Formaldehyde on dust	NIOSH 5700	IOM Sampler 225-70A with PVC filter 225-5-25	AirChek TOUCH 220-5000TC	For textile or wood dust.
Glutaraldehyde	NIOSH 2531	Sorbent tube 226-118	Pocket Pump TOUCH 220-1000TC	
	NIOSH 2532	Sorbent tube 226-119		
	---	Sorbent tube 226-10	AirChek TOUCH 220-5000TC	
	OSHA 64	Preloaded coated filter cassette 225-9003	AirChek TOUCH 220-5000TC	

* Other methods may apply. SKC recommends those listed.

Passive Air Sampling Solutions

Target Compound	Select Methods* / SKC Validation	SKC Sample Collection Media and Part No.	Notes
Formaldehydes and other aldehydes	OSHA 1007 EPA IP-6C EPA TO-11A /Research Report 1608	UME ^x 100 500-100	U.S. OSHA requires active sampling when the source of formaldehyde is formalin.

* Other methods may apply. SKC recommends those listed.