

Analysis of formaldehyde in air with active pump sampling

Principle

Formaldehyde is concentrated on a tube, which contains silica gel coated with 2,4-dinitrophenylhydrazine (DNHP). The formaldehyde concentration is determined by HPLC.

Advantages

Small, lightweight and portable.
Selective determination of formaldehyde.
Can be used for short time sampling.

Reference

NIOSH method 2016
ISO/DIS 16000-3:1999

Range:	0.3 µg – 100 µg /sample		
Airflow:	0.1 – 1 l/min		
Detection limit:	15 l air =>	0.02 mg/m ³	
	60 l air =>	0.005 mg/m ³	
Formaldehyde 1 ppm = 1.2 mg/m ³ at 20 °C			

Air quality standard for formaldehyde (ppm)

Country	TWA*	Ceiling value
Austria	0.5	0.5
Finland	0.3	1
France	0.5	1
Germany	0.5	-
Norway	0.5	-
Sweden	0.5	1

* Time Weighted Average for a working day

Sampling equipment



Tube, which contains Silica Gel coated with 2,4-DNPH

Battery operated pump

Weight: 535 gram Size: 10x10x5 cm