

Nitrous-Oxide Diffusion Sampler

Order No. 81 01 472

Application Range

Adsorbate	nitrous oxide (laughing gas)
Sorption agent	molecular sieve
Adsorption layer	400 mg
Standard range of measurement	2.5 to 500 ppm
Sampling period	15 min to 8 hours
Diffusion rate	0.03 µg/ppm x h
Sampling rate	0.27 mL/min
Adsorption capacity	120 µg
Tube length	115 mm
Outside diameter	7 mm
Inside diameter	5 mm

Permissible ambient conditions

Temperature	5 to 35°C
Moisture	below 20 mg/L H ₂ O
Atmospheric pressure	below 1050 hPa
Air velocity	at least 1 cm/s

Advice for sample-taking

The sampling time of nitrous-oxide diffusion sampler depends on the expected oxide nitrous concentration in the air to be analysed. The following sampling times are recommended in the case of measurements in the range of 5 to 100 mL/m³ (ppm) nitrous oxide:

Nitrous oxide concentration time	Recommended sampling
5 ppm	4 to 8 h
25 ppm	1 to 8 h
50 ppm	30 min to 8 h
100 ppm	15 min to 8 h

After sampling the tube must be sealed with the polyethylene supplied caps.

Note concerning the analysis

The analysis is made according to DFG method No. 2 "Dinitrogen monoxide" via thermodesorption and infrared spectroscopy. For evaluation of the sampling tubes and systems please contact Dräger.



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