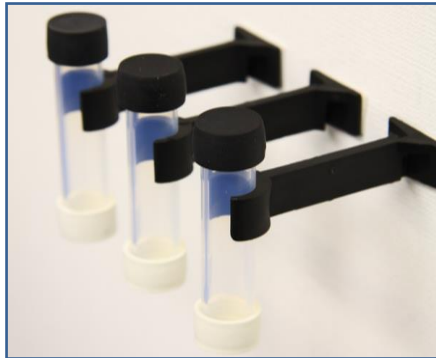


Technical Data Sheet: TDS 6

DIF300RTU-RA – OZONE DIFFUSION TUBE

This tube is designed for passively monitoring gaseous molecules of Ozone.



Description: Fluorinated ethylene polymer tube fitted with **black** and white thermoplastic rubber caps. The coloured cap contains the absorbent. A one-micron porosity filter is fitted to the white cap to prevent the ingress of airborne particulate nitrate.

The concentrations of nitrate ions chemically adsorbed are quantitatively determined by **Ion Chromatography** with reference to a calibration curve derived from the analysis of standard nitrate solutions (**UKAS Accredited** In-house Method GLM 2).

Suitable for carrying out spatial or localized assessments for ozone in ambient air, workplace or industrial monitoring.

Clips and straps are not included and must be ordered separately.

Tube Dimensions: 71.0mm length x 11.0mm internal diameter.

Recommended Exposure Periods: 2 –4 weeks.

Air Velocity: Tube fitted with filter therefore negligible influence.

Storage: Store in a dark, cool environment preferably between 5-10°C.

Shelf Life: 10 weeks from despatch. Should be analysed within shelf life.

Desorption Efficiency: $d = 0.99$ (determined using N.I.S.T. Standard Analytes).

Limit of detection: Less than $10 \mu\text{g m}^{-3}$ over a 4-week exposure period. Specific values available upon request.

Analytical Expanded Measurement Uncertainty: available upon request.

Working Range: $6.8 - >200 \mu\text{g m}^{-3}$.

Relevant Standards: BS EN 13528 Parts 1-3: 2002/3.

Special Factors: Potential interference from aerosol particles containing high levels of nitrate. High readings may occur due to a breakdown of NO/NO₂ from solar irradiation when tubes are exposed in intense direct sunlight.