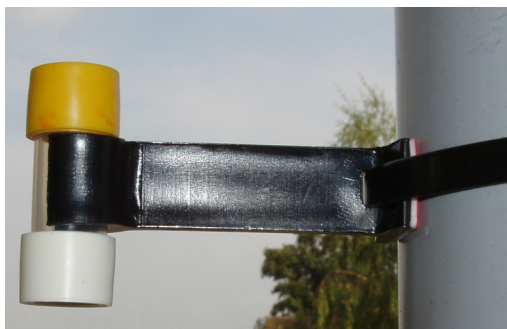


Technical Data Sheet: TDS 7

DIF 400 RTU – AMMONIA

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



Description: Fluorinated ethylene polymer tube fitted with yellow and white thermoplastic rubber caps. The yellow cap contains the absorbent. A one-micron porosity filter is fitted to the white cap to prevent the ingress of airborne particulates containing ammonium.

The concentrations of ammonium ions chemically adsorbed are quantitatively determined by Ion Chromatography, with reference to a calibration curve derived from the analysis of standard ammonium solutions. (Analysis carried out in accredited laboratories, in accordance with ISO 17025).

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

Tube Dimensions: 35.5mm length x 11.0mm internal diameter.

Recommended Exposure Periods: 1 –4 weeks.

Uptake Rate: $163.2 \times 10^{-6} \text{ m}^3 \text{ hr}^{-1}$.

Air Velocity: Tube fitted with filter therefore negligible influence.

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

Shelf Life: 8 weeks from preparation date.

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

Limit of Detection: 3.89 ppb (2.7 ugm^3) over a 2-week exposure period.

Analytical Expanded Measurement Uncertainty: +/- 10.6 %.

Special Factors: Potential interference from aerosol particles containing high levels of ammonium i.e. fertilizers.