

# Traceable Diffusion Tubes

New range of traceable & uniquely identifiable Refillable Diffusion tubes.

Traceable Diffusion Tubes compliment our existing range of Kin-Tek Trace Source™ permeation tubes, for over 500 compounds.

The new Traceable Diffusion Tubes offer greater flexibility, for making a wider range of VOCs & SVOCs gas standards. They have been designed by Tracer Measurement Systems Ltd, (© 2008), to be easily refillable from the screw-capped end of the tube.

## Description

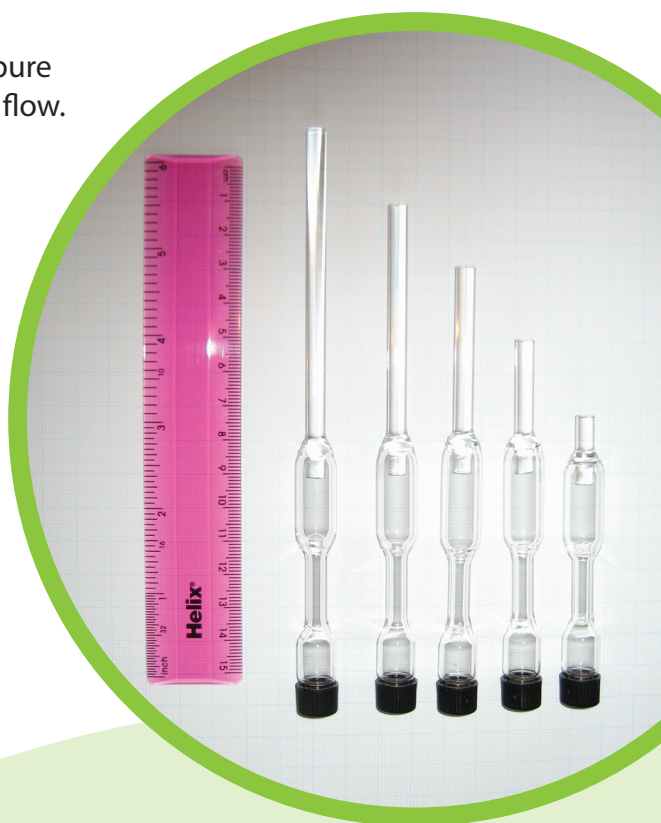
Traceable Diffusion Tubes are used to emit pure component vapour, for making traceable gas mixtures, in the ppm to ppb range.

Each diffusion tube consists of a glass storage area for storing pure compound and a precision capillary, for controlling the vapour flow.

Tubes are used in a thermostatically heated oven and are calibrated by weighing them at intervals over a period of time, using traceable gravimetric calibration.

**The output concentration is determined by the following:**

- 1.The tube capillary size and length.**
- 2.The vapour pressure and gas-phase diffusion coefficient of the compound.**
- 3.The temperature of the Vapour Generator oven.**



## Benefits

- Economic advantage: tubes can be refilled over and over again.
- Research & development: ideal when fast analytical method development is required.
- Vapour standards can be produced from liquids & solids with a modest sublimation rate, including SVOC's
- Can be used for oxygen sensitive compounds, or for unstable compounds with a shorter shelf life.
- Verifiable Accuracy - Traceable Diffusion Tubes can be gravimetrically calibrated.
- Each tube is laser engraved, denoting the serial number, capillary length, internal diameter, reservoir size etc. This unique feature enables these tubes to be readily traceable, within your own Quality Management Audit System.
- Traceable Diffusion Tubes are available with a standard range of tube lengths, with nominal internal bore sizes. This full range gives an enormous 32000-fold range of emission rates, because of the range of tube lengths and diameters available.
- Traceable Diffusion Tubes can be used in both fixed and portable Vapour Standards Generators for traceable validation and calibration of both field and laboratory measurements.

## Product Codes for Traceable Diffusion Tubes:

AA 2cm length 4mm id  
AB 2cm length 3mm id  
AC 2cm length 2mm id  
AD 2cm length 1.5mm id  
AE 2cm length 1mm id  
AF 2cm length 0.5mm id  
AG 2cm length 0.2mm id  
AH 2cm length 0.15mm id  
AI 2cm length 0.1mm id  
AJ 2cm length 0.05mm id  
BA to BJ 4cm length  
CA to CJ 6cm length  
DA to DJ 8cm length  
EA to EJ 10cm length

An additional range of product codes has either an L at the end (denoting an additional 2ml capacity sample reservoir), e.g., AAL (2cm tube length with 4mm bore and extra 2ml reservoir) or an S, denoting the precision bore tubing used has a specified tolerance on the internal diameter.

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