

URPID Pre-FilterTube Benzene-0.05 (PBE-1)

Part No: CF000896



Instructions for Use

1 Application

The PID Pre-Filter tube Benzene is used for selective determination of Benzene in air containing a mixture of VOC and only suitable for operating with PID instrument.

2 Sampling Pump

The PID pre-filter Benzene tube is suitable for operating with PID instrument.

3 Measuring Range

0.05 to 200 ppm of Benzene with flow rate of e.g. 360 ml/min for approximately 2 min for spot reading, 15 min for STEL reading.

4 Chemical Reaction and Color Change

Reaction of VOC except benzene with Chromium compound in presence of sulphuric acid.

Color change: Orange → Brownish-green

5 Sampling Procedure

- Break off tips of tube.
- Insert tube tightly into the PID Pre-Filter tube holder. Arrow on tube must point toward the device.
- Refer to the PID instrument manual for details of fitting of detector tube, carrying out the PID zero point calibration and to carry out the air sampling using Pre-Filter tube Benzene.
- Start Benzene measurement and observe the measurement time. During the benzene measurement the orange indicating layer turns to brownish-green in the presence of VOC like toluene, xylene, nitrobenzene, cyclohexane etc., if present in the sample air.
- If the discoloration extends beyond $\frac{3}{4}$ of the indicating layer, the filter capacity of tube is not sufficient, and the PID instrument shows a reading which is higher than the actual benzene concentration.

6 Ambient Condition During Sampling

Detector tube can be used without compensation of reading between 2 °C – 40 °C and up to 95 % RH at 1 atmosphere pressure.

7 Cross sensitivity tested with PID instruments

Compound	Test conc. (ppmv)*	Apparent Response on PID Instrument
Toluene	400	0
Xylene	200	0
Cyclohexane	10	0
Propane	1000	0
Butane	100	0
Acetone	400	0
Ethyl acetate	100	0
Ethanol	50	0
Pentane	1500	0
Hexane	100	0
Heptane	20	0
Octane	300	0
Hydrogen sulphide	25	0

*Not necessarily the maximum allowable conc.

8 Storage and Transport

Store unopened tubes in a dark place at 5 °C - 25 °C. Storage in refrigeration is advised. For expiration date see back of the package.

9 Safety Advice / Disposal

For tube contents, the following indications of danger apply: R21/22.

Safety advice S:2-24/25.

Tubes must be kept away from unauthorized persons. For disposal as waste observe the legal regulations applicable in the individual country of use.

Note:

Caution while opening the tube – glass splinters may come off. Danger of injury due to sharp edges.

After expiry date the PID- Pre filter benzene tube must not be used anymore.