

Benzene

Toluene

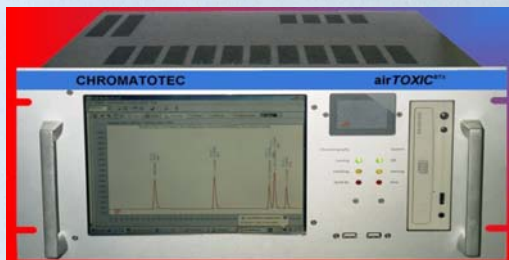
Ethylbenzene

Xylene (o,m,p)

Benzene
1,3-butadiene optional

A73 air**TOXIC**^{BTX} **A74** **PID**
 A GC/PID for automatic monitoring of BTEX.
 In air, water and soils

European Approval



Model air TOXIC BTX A74000

Environment: BTEX : analysis in non urban area
 Indoor air
 Outdoor

- BTEX + CALIB in standard = A73000
- BTEX analyser (without Calib) = A74000
- BTEX + 1,3-butadiene = A75000

Process: Industrial Hygiene
 Fence line

**PID HIGH STABILITY WITH SELF CLEANING LAMP
 LCD DISPLAY
 COMPLETELY AUTONOMOUS ON LINE ANALYSER**

airTOXIC^{BTX} PID

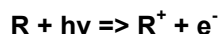
A GC/PID for automatic monitoring of BTEX.
In air, water and soils

Principle of the airTOXIC^{PID}

- This instrument uses a port valve with a **single absorbent trap**, and a metallic 0.28 mm ID column.
- It has a minimum detection level of as low as **10 ppt** for Benzene or 1.3. Butadiene (A75000) in ambient air.
- Miniaturization, sensitivity, mobility and flexibility are its main features. Everything from the sample port up to the data storage is integrated in a 19"-rack 5U.
- Programmed **gradient temperature** of the oven and pressure/flow control of the carrier gas by the **piezo-valve**.
- **Before final delivery the analyser is tested for two weeks by the quality control department.**
- Photo ionisation detector (**PID**), 10,6 eV lamp.
- **Self-cleaning of the lamp for high stability**
- Bi-directionnal RS-232 to transfer data and results to the **internal computer**.
- The Vistachrom software enables the user to view and store data on a industrial computer. It provides comfortable user friendly utilities to recalculate, calibrate and export data and to configure the measurement.
- The software allows the calculation of retention time, area, mass or concentration profiles, in any international measuring unit.
- **CALIB in standard in A73000** Flow=50ml/min N2 or air in continu and 250 ml/min 6 minutes in calibration methode (one by day)
- LCD DISPLAY

Theory

Photoionization is initiated by the absorption of short wavelength ultraviolet light by a molecule. This can lead to ionization as follows:



If the ionization potential of R is less than or equal to the energy of the photon, $h\nu$, then the species are ionized
The sensor consists of a sealed interchangeable ultraviolet lamp that emits a selected energy line. Lamps with energies of 8.3, 9.5, 10.6 and 11.7 eV are available.

Options

- Digital output: MODBUS / JBUS or MGS1 communication protocol.
- **CALIB for A74000 or A75000**
- **Automatic** validation and autocalibration
- Nitrogen generator
- Modem support and PC anywhere
- Analog output 4-20 mA or 0-10 V.
- 1.3. Butadiene (A75000)

Technical specification

airTOXIC^{BTX} PID

BTX analysis:

Benzene
Butadiene (option A75000)
Toluene
Ethyl-benzene
Ortho, meta, para-xylene

Low detection limit (LDL) in automatic mode :

≤ 0.01 ppb

Detection range :

0,32 to 350 µg/m³ of Benzene
0-100 ppb for benzene

Relative standard variation :

< 0.3 % over 48h (RT)
< 3 % over 48 h (Conc.)

Results on LCD :

- Data storage
- 4-20 mA current output
- MODBUS / JBUS or MGS1 communication protocol (option).

Cycle time:

15 min. as standard (30 min in option)

Gas supply:

Nitrogen: 6 ml/min
(inlet 3 bars ; 1/8" swagelock)
Sample inlet (vacuum pump) 1/4" swagelock

Sample volume:

20 to 240 ml (programmable)

Operation Temperature:

Room with air conditioning°

Computerized Electronic

- CPU: : ≥ Pentium III – RAM: ≥ 256MB
- Hard Disk System: ≥ 5 GB
- USB Connecting Port
- Communicate Port with Printer
- Two sets RS-232 ports
- Built-in data processing function: ≥ 56k and Internet card
- Display: ≥ 10" TFT Color TFT LCD
- Legally authorized software: ≥ Windows 98 or XP or NT, MSDOS 6.22

Power supply:

-main (230V / 115V 50 Hz/60Hz)
-battery 24V (option)

Electrical consumption:

mean 150 VA, Peak 360 VA

Dimension:

Rack 482 mm (19")
Height 222 mm (5U), depth 600 mm

Weight:

20 kgs

Part number:

A73000 or A74000 or A75000

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