

Purge & Trap cabinet

Surveillance of VOC in water - BTEX included
Based on EPA* 502.2 Method



Model: A52022-502-MS

Water markets

Finished drinking water
Raw source water
Drinking water
Surface water
Wastewater (head space / ppt)
Rain water

Air markets in option

Ambient air control
Urban/Non urban area pollution control
Indoor measurements
BTEX/PAMS/CE analysis

Process

Finished water
Waste water / effluent



Chromatotec® is specialised in VOC, Sulfur and permanent gases analysis at trace and ultra trace levels (ppm, ppb, ppt).
Please visit our website for more details.

Chlorobenzene

STYRENE

BTEX

TRIMETHYLBENZENE

TRICHLOROETHYLENE

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Principle:

The airmoVOC 624 + DET QMS uses a valve with a sample trap. It also features a metallic capillary column.

- 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 for GC and 10U for DET QMS.
- Uninterrupted sampling with pre-concentration on 1 absorbent tube
- Gas chromatograph with metallic column with programmable temperature gradient oven.

Pressure control of the carrier gas by piezo-valve.

- One week tested after production for quality control.

Vistachrom software enables the user to visualize and store data on a PC.

Furthermore it provides comfortable utilities to recalculate, calibrate and export data and to set-up measurement.

The software allows the calculation of retention time, area, mass or concentration profiles.

Purge: for on line analytic instrument

- Based on EPA 502.2 Method
- 5 ml of water sample as standard or optional 25 ml sparger
- Purge with inert gas: ultra pure N₂ (Ultra High Purity) – 40 ml/min
- Sampling time: 11 minutes
- Dead volume < 15 mL (volume between water and trap)
- Bubbles with a diameter < 3 mm at the origin of the frit
- Automatic rinse (twice as standard)

Example of application

All VOC below can be analysed	N° CAS	All VOC below can be analysed	N° CAS
1,2-Dichloroethane	107-06-2	o-Xylene	95-47-6
Benzene	71-43-2	Isopropylbenzene	98-82-2
1,2-Dichloropropane	78-87-5	1,3,5-Trimethylbenzene	108-67-8
Trichloroethylene	79-01-6	1,2,4-Trimethylbenzene	95-63-6
Toluene	108-88-3	1,3-Dichlorobenzene	541-73-1
Tetrachloroethylene	127-18-4	1,4-Dichlorobenzene	106-46-7
Chlorobenzene	108-90-7	1,2-Dichlorobenzene	95-50-1
Ethylbenzene	100-41-4	1,2,4-Trichlorobenzene	120-82-1
* m-Xylene	108-38-3	1,2,3-Trichlorobenzene	87-61-6
* p-Xylene	106-42-3	Hexachloro-1,3-butadiene	87-68-3
Styrene	100-42-5	*SUM of M+P Xylene	

Options:

- Automatic validation and calibration with internal CALIB
- 24 V DC power supply
- Integrated hydrogen and zero air generators for autonomous analysers
- Multiplexer: 2 to 32 streams
- 1 stream for water and 1 stream for air
- Internal or external multipoint calibration and zero with CALIB MFC, XXXCYL MFC, airmoCAL PAH
- airmoVOC C6C16 for more VOCs and S VOCs
- Analog output 4-20 mA or 0-10 V

Product technical specifications:

Analysis by airmoVOC 624 +DET QMS:

3 main solutions :

- Up to 60 compounds with our Purge & Trap 1 GC MS FID
- BTEX and chlorine compounds

Detection limit:

- < 0.05 µg/l for BTEX on FID and MS

Detection range:

- 0.5 to 20 µg/l for surface water and finished drinking water
- Other detection range in option

Relative standard deviation (RSD):

- < 0.3% over 48h (Retention Time)
- < 3% over 48h (Concentration)
- < 10% for water analysis (Concentration)

Base Line: Zero drift:

- < ±3%

Linearity:

- R² > 0.99 on all compounds

Supervisor:

- Full result storage (data and chromatogram)
- Embedded computer Windows® based with LCD display
- 128 GB of Hardware storage on SSD memory
- 4 USB Connecting Port
- Two RS-232 ports
- Display: 10" TFT Color LCD
- MODBUS RTU / JBUS communication protocol

Cycle time:

- 30 min to 60 min

Gas supply:

- H₂ (FID and carrier gas): 30 ml/min (inlet 2 bars ; 1/16" double ferrule)
- Air (FID): 180 ml/min (inlet 2 bars ; 1/8" double ferrule)
- N₂ (Purge): 40 ml/min (inlet 3 bars ; 1/8" double ferrule)
- Sample inlet (vacuum pump) ; 1/4 double ferrule

Operation Temperature:

- Room with air conditioning: 10 to 25°C

Purge:

- ZERO N₂ analysis
- ZERO WATER analysis (Blank)
- Standard water analysis

Power supply:

- Main: 230V / 50 Hz or 115V / 60 Hz

Electrical consumption:

- Mean: 150 VA + 1kVA (MS) + gas generators

Installation in a 19" 33U cabinet:

- airmoVOC 624
- DET QMS
- Purge system
- Nitrogen + hydrogen + air generators

To order:

Model:

Baie GCMS Purge & Trap , Method 502-2

A52022-502-MS

Chromatotec® is continuously improving its products, therefore these specifications are subject to change without notice

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