

汽油中甲缩醛测定的气相色谱新方法

A new method of gasoline in gas chromatography for determination of methylal
February 2012, the South more than the outbreak of gasoline door events, including Guangxi, Guizhou, the most serious. Many of the cars appeared in different situations, coke excessive jitter and flameout phenomenon.

For suspected of containing methylal car with gasoline samples, the common analysis methods with infrared spectroscopy, temperament spectrometry, multidimensional gas chromatography. Either of these 3 methods is expensive, or the operation is complex, high maintenance costs, is not conducive to the promotion.

Tengzhou City Xiangying Analysis Technology Co., Ltd. with the times, to the scientific development as a guide, under the leadership of general manager, Wang Xiaoying, successful R & D out XiangyingGC7990plus special gas chromatograph, with methylal special column XY-methylal. The successful determination of the gasoline of methylal in content, the result is accurate and reliable, worthy of promotion. This technology in the domestic leading level, welcome new and old customers call Advisory negotiations.

2012年2月,南方多地爆发汽油门事件,其中以广西、贵州最为严重。很多汽车出现不同情况的积炭过多、抖动、熄火等现象。

针对疑似含有甲缩醛的车用汽油样品,常见分析方法有红外光谱法,气质联用法,多维气相色谱法。这3种方法要么价格昂贵,要么操作复杂,维护成本高,不利于推广。

滕州市翔鹰分析技术有限公司与时俱进,以科学发展为指导,在王晓莹总经理的带领下,成功研发出XiangyingGC7990plus专用气相色谱仪,配合甲缩醛专用柱XY-methylal,成功测定了汽油中甲缩醛含量,结果准确可靠,值得推广。此项技术在国内处于领先水平,欢迎新老客户来电咨询洽谈。

Tengzhou Xiangying Analysis Technology Co. Ltd.



Product model: GC-7990

Product quotation:

Product features: hawk technology is the latest generation of gas chromatograph, the instrument adopts foreign original software system, stable performance, widely used in chemical industry, pesticide, medicine, environmental health, indoor testing, power supply system of liquefied petroleum gas industry.

GC-7990 gas chromatograph detailed information:

7990 performance characteristics:

1 large screen LCD 320*240 in the English two kinds of display, the picture is simple and clear, beautiful appearance.

2. To improve the automation, intelligent, multi-functional, multidimensional chromatographic system (ARM9-32 bit chip and foreign original software) width of the heating rate (0.1 degrees - 40 degrees per minute, to 0.1 degrees for the incremental set), fast cooling speed, and does not float (from 280 degrees to 45 degrees, constant temperature only 6 points) system, temperature control technique for high stability, very good performance price ratio.

3 perfect self diagnosis function, can make the user easy to check the fault location and fault type.

Perfect temperature protection and platinum wire resistance to open, short circuit alarm function, to ensure that the temperature is not out of control.

4 optional with the built-in AD conversion circuit, can be directly digital output signal to achieve complete control and analysis of all the work on the PC.

The 5 column box can realize negative temperature operation by dry ice or liquid nitrogen.

6 in 180 degrees Celsius, the column box control accuracy of up to + 0.01.

Three can also be installed at the same time 7 columns or two capillary column, dual amplifier can work at the same time.

Three can be installed at the same time 8 detectors and methane conversion furnace.

9 manual feeding, automatic start sampling device, automatic ignition and other functions of optional, optional ceramic or quartz nozzle.

10 instruments with automatic power-off protection function.

Six 11 road temperature control, seven steps temperature programmed capillary and packed column vaporization room temperature control, intelligent double after the door.

12 technical indicators:

Temperature range of column box: room temperature 5 C -400 C (0.1 C for the incremental).

Temperature accuracy: no more than + 0.1.

Temperature gradient: + 1 C (100 C -360 C programming).

Heating rate: 0.1 C -40 C /min (to 0.1 degrees Celsius for the incremental set).

Sample inlet, temperature control range of the detector: room temperature -400 C +10.

FID detector:

The detection limit of Mt is less than or equal to 5×10^{-12} g/s (n = sixteen)

Noise: less than or equal to 5×10^{-14} A

Drift: less than or equal to 1×10^{-13} mv/h

TCD detector:

The sensitivity of S is greater than or equal to 3500mv.ml/mg (benzene)

Noise is less than or equal to 10uv

Drift less than or equal to 30uv/h

Voltage 220V + 10%, maximum power 2200W.

Exterior size: 570 x 480 x x 500 (mm)

Column box size: 270 x 248 x x height 260 (mm)

Instrument weight: 46kg

Detector sensitivity or sensitivity drift noise notes

Flame photometry (FPD) $Mts = 5 \times 10^{-11}g/s = 4 \times 10^{-11}A/30min = 2 \times 10^{-12}A$

7990性能特点:

1. 大屏幕液晶320*240中英文两种显示, 画面切换简单明了, 外观时尚美观。
2. 完善的自动化, 智能化, 多功能化, 多维色谱系统 (ARM9-32位芯片和国外原

版软件) 宽幅的升温速率 (0.1度-40度/min, 以0.1度为增量任设), 快速的降温速度, 且不上下浮动 (从280度降到45度, 恒温仅需6分) 系统, 高稳定性的温控技术, 非常好的性能价格比。

3. 完善的自诊断功能, 能使用户方便的检查故障部位和故障类型。
- 完善的温度过热保护及铂丝电阻开, 短路报警功能, 保证温度不失控。
4. 可选配内置 AD 转换电路, 可直接数字输出信号, 实现在 PC 上完成控制与分析的全部工作。
5. 柱箱通过干冰或液氮可实现负温度操作。
6. 在180°C以内, 柱箱控制精度高达±0.01°C。
7. 可同时安装三个填充柱或两付毛细管柱, 双放大器可同时工作。
8. 可同时安装三个检测器及甲烷转化炉。
9. 手动进样、自动启动进样装置、自动点火等功能任选, 陶瓷或石英喷嘴任选。
10. 仪器具有断气自动停电保护功能。
11. 六路控温, 七阶程序升温, 毛细管和填充柱汽化室独立控温, 智能双后开门。
12. 技术指标:

柱箱控温范围: 室温5°C-400°C (以0.1°C为增量任设)。

温度精度: 不大于±0.1°C。

温度梯度: ±1°C (100°C-360°C程序升温)。

升温速率: 0.1°C-40°C/min (以0.1°C为增量任设)。

进样口、检测器控温范围: 室温+10°C-400°C。

FID 检测器:

检测限 M_t 小于等于 5×10^{-12} g/s (正十六烷)

噪声: 小于等于 5×10^{-14} A

漂移: 小于等于 1×10^{-13} mv/h

TCD 检测器:

灵敏度 S 大于等于 3500mv.ml/mg (苯)

噪声 小于等于 10uv

漂移 小于等于 30uv/h

电压 $220V \pm 10\%$, 最大功率 2200W。

外型尺寸: 长570×宽480×高500 (mm)

柱箱尺寸: 长270×宽248×高260 (mm)

仪器重量: 46kg

检测器	灵敏度或敏感度	漂移	噪音	备注
火焰光度 (FPD)	$M_t \leq 5 \times 10^{-11} \text{g/s}$	$\leq 4 \times 10^{-11} \text{A/30min}$	$\leq 2 \times 10^{-12} \text{A}$	