

System Gas Chromatograph

Fast Benzene Toluene Analysis Nexis GC-2030FBTA1

An appropriate internal standard such as butanone is added to the gasoline sample, which is then introduced into a gas chromatograph equipped with two columns and two advanced pressure controls (APCs). The sample first passes through a non-polar pre-column (OV-1) that elutes components according to their boiling points. After the elution of isooctane, by changing the pressure of APCs, the pre-column is back-flushed to elute those portions whose boiling points are higher than isooctane and vent them to the atmosphere. Isooctane and lighter portions are directed into the polar column and elute quickly without separation while benzene and toluene are eluted through the polar column and detected by FID. Since capillary columns are employed, this system achieves fast analysis. The system includes LabSolutions GC workstation software.

Analyzer Information

System Configuration:

One valve / two capillary columns with one FID detector

Sample Information:

Benzene, Toluene in Gasoline

Methods met:

ASTM-D3606

Concentration Range:

No.	Name of Compound	Concentration Range	
		Low Conc.	High Conc.
1	Benzene	1ppm	1000ppm
2	Toluene	1ppm	1000ppm

Detection limits may vary depending on the sample.
Please contact us for more consultation.

System Features

- 4 minutes analysis for gasoline analysis
- High sensitivity FID
- Using advanced pressure control (APC) for backflushing heavy hydrocarbons without valves
- Good repeatability

Typical Chromatograms

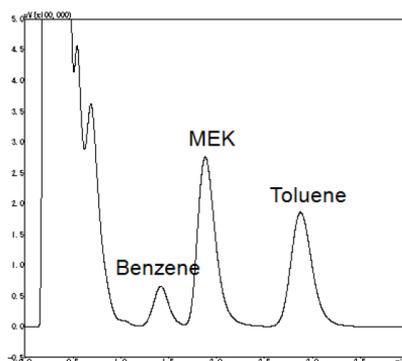


Fig. 1 Chromatogram of FID

First Edition: November, 2017