

Application Data Sheet

No.48

System Gas Chromatograph

Hydrocarbon Analysis with Liquid Sampling Valve for LPG Nexis GC-2030LPGHC2 GC-2014LPGHC2

This method is for determination of the hydrocarbons in LPG. LPG is vaporized by liquid sampling valve. After vaporization of hydrocarbons, the gas sample moves to a split/splitless injector and separated by an alumina capillary column, then detected by FID. The analysis time is approximately 30 minutes. The system includes LabSolutions GC workstation software.

Analyzer Information

System Configuration:

One valve / capillary column with FID detector

Sample Information:

Liquid permanent gas C₁-C₆

Concentration Range:

No.	Name of Compound	Concentration Range		Detector
		Low Conc.	High Conc.	
1	CH ₄	0.001%	10.0%	FID
2	C ₂ H ₄	0.001%	10.0%	FID
3	C ₂ H ₆	0.001%	10.0%	FID
4	C ₂ H ₂	0.001%	10.0%	FID
5	C ₃ H ₈	0.001%	5.0%	FID
6	C ₃ H ₆	0.001%	5.0%	FID
7	i-C ₄ H ₁₀	0.001%	1.0%	FID
8	n-C ₄ H ₁₀	0.001%	1.0%	FID
9	Propadiene	0.001%	1.0%	FID
10	Trans-C ₄ H ₈	0.001%	0.5%	FID
11	1-C ₄ H ₈	0.001%	0.5%	FID
12	i-C ₄ H ₈	0.001%	0.5%	FID
13	cis-2-C ₄ H ₈	0.001%	0.5%	FID
14	i-C ₅ H ₁₂	0.001%	0.5%	FID
15	n-C ₅ H ₁₀	0.001%	0.5%	FID
16	1,3-C ₄ H ₆	0.001%	0.5%	FID
17	C ₃ H ₄	0.001%	0.5%	FID
18	hexane	0.001%	0.5%	FID

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

System Features

- 15 minutes analysis for hydrocarbons analysis can be carried out
- Single FID channel with split/splitless injector
- Liquid sample is measured through internal sample loop in the liquid sampling valve

Typical Chromatograms

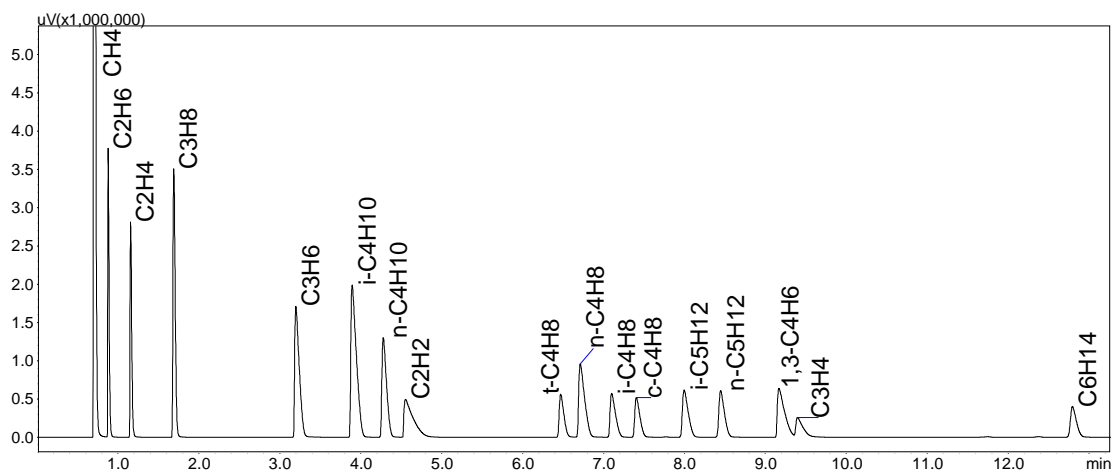


Fig. Chromatogram of FID

First Edition: November, 2017

