

Application Data Sheet

No. 69

System Gas Chromatograph

Hydrocarbons in Propylene Analysis System Nexis GC-2030HC

This system is designed for quantitative and qualitative analysis of Hydrocarbons in propylene. A total of 1 valve and 2 columns are applied in this GC system. Sample is introduced into one sample loop or directly injected into SPL for determination. Using a plot Al₂O₃/KCl and a CP-SILICA plot as main column, Hydrocarbons elute to a TCD. LabSolution chromatography workstation system handles all aspects of GC control, automation, and data handling.

Analyzer Information

System Configuration:

One valve / two capillary columns with two FID detectors

Sample Information:

C1-C3, VA, EA, 1,3-C₅H₈, 1,2-C₅H₈, 3-Methyl-1,2-Butadiene

Concentration Range:

| No. | Name of Compound | Concentration Range | | Detector |
|-----|-----------------------------------|---------------------|------------|----------|
| | | Low Conc. | High Conc. | |
| 1 | CH ₄ | 5.0ppm | 100.0ppm | FID |
| 2 | C ₂ H ₆ | 5.0ppm | 200.0ppm | FID |
| 3 | C ₂ H ₄ | 1.0ppm | 10.0ppm | FID |
| 4 | C ₃ H ₈ | 5.0ppm | 100.0ppm | FID |
| 5 | C ₂ H ₂ | 0.1ppm | 10% | FID |
| 6 | VA | 1.0ppm | 10% | FID |
| 7 | EA | 1.0ppm | 10% | FID |
| 8 | 1,2-C ₅ H ₈ | 1.0ppm | 10% | FID |
| 9 | 1,3-C ₅ H ₈ | 1.0ppm | 10% | FID |
| 10 | 3-Methyl-1,2-Butadiene | 1.0ppm | 10% | FID |

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

System Features

- 40 minutes analysis for hydrocarbons analysis can be carried out
- Two FID channels
- Good repeatability

Typical Chromatograms

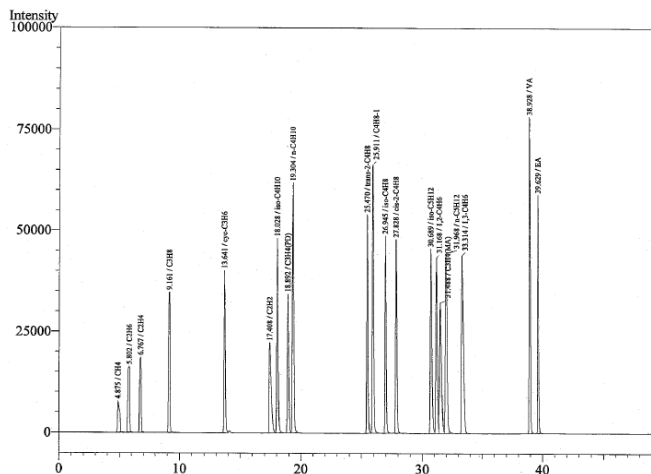


Fig. 1 Chromatogram of FID-1

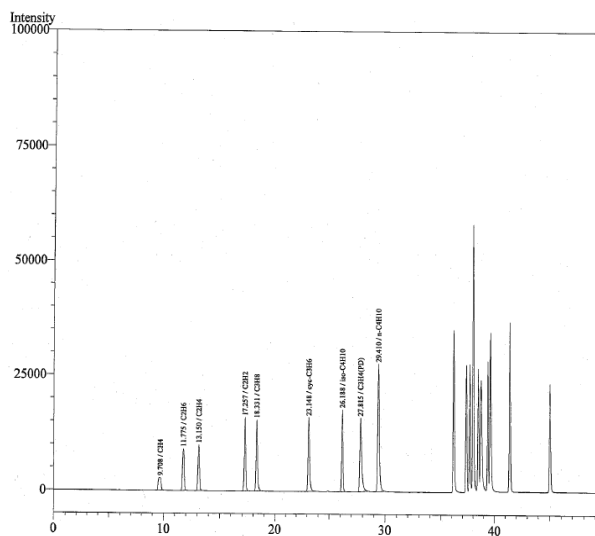


Fig. 2 Chromatogram of FID-2