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Application Data Sheet

No.49

System Gas Chromatograph

Permanent Gas Analysis System
Nexis GC-2030PGAS1
GC-2014PGAS1

This method is for determination of the permanent gases in various pure gases. Sample is introduced into two sample loops of two 10-port valves. One sample loop is for determination of He and H2, the other is for determination of Ar, O2and N2. Both 10 ports have Porapak-N backflush columns to remove CO, CO and hydrocarbons. Nitrogen gas is used for He and H2 analysis, and Helium is used for Ar, O2 and N2 analysis. Two molecular sieve capillary columns carry out the separations. The analysis time is approximately 9 minutes. The system includes LabSolutions GC workstation software.

Analyzer Information

System Configuration:
Two valves / capillary column with Two TCD detectors

Sample Information:
He, H_2, Ar, O_2, N_2

Concentration Range:

No.	Name of Compound	Concentration Range	
		Low Conc.	High Conc.
1	He	0.005%	10%
2	H2	0.005%	10%
3	Ar	0.005%	10%
4	O2	0.005%	20%
5	N2	0.005%	50%

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

Typical Chromatograms

・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 device

System Features

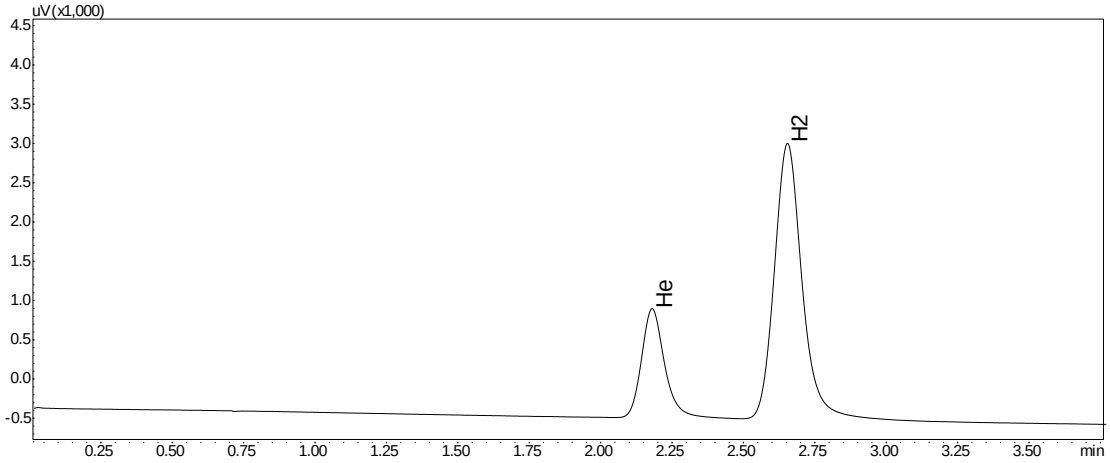

Fig. 1 Chromatogram of TCD

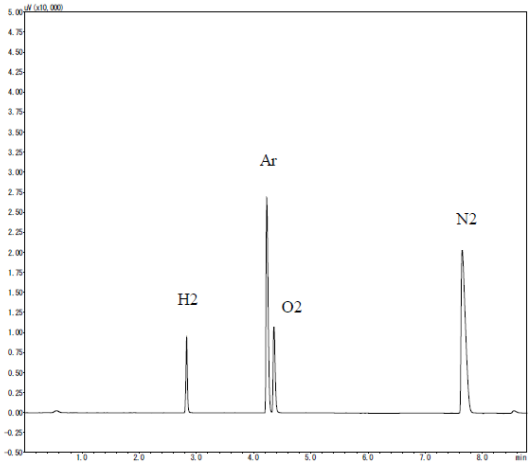

Fig. 2 Chromatogram of TCD

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