

# Application Data Sheet

## No.80

## System Gas Chromatograph

### O<sub>2</sub> – CO, Ar Analysis System Nexis GC-2030PNC GC-2014PNC

This instrument is designed for determining the permanent gas and methane within the composition range shown in the specification sheet.

A total of 3 valves and 5 columns are used in this GC system. The sample is loaded into two sample loops for determination. O<sub>2</sub> is detected by TCD-1, the valve timing then allows the other components to be separated individually by a Porapak-N and MS-5A column and to be detected by TCD-2. The system includes LabSolutions workstation software and BTU and Specific Gravity calculation software.

#### Analyzer Information

##### System Configuration:

Three valves / five packed columns with two TCD detectors

##### Sample Information:

O<sub>2</sub>, N<sub>2</sub>, Ar, CO, CH<sub>4</sub>

##### Concentration Range:

No.	Name of Compound	Concentration Range		Detector
		Low Conc.	High Conc.	
1	Ar+O <sub>2</sub>	0.05%	30%	TCD-2
2	N <sub>2</sub>	0.05%	100%	TCD-2
3	CH <sub>4</sub>	0.05%	90%	TCD-2
4	CO	0.05%	30%	TCD-2
5	O <sub>2</sub>	0.05%	30%	TCD-1
6	Ar	0.05%	30%	TCD-2

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

#### System Features

- Versatile software easy GC system operation
- One TCD channel or two FID channels
- Good repeatability

Typical Chromatograms

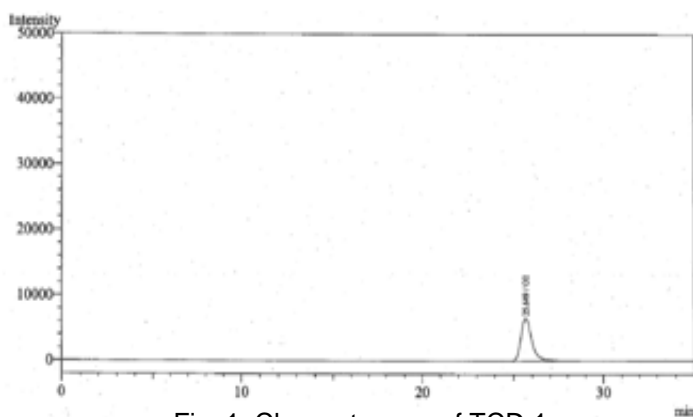


Fig. 1 Chromatogram of TCD-1

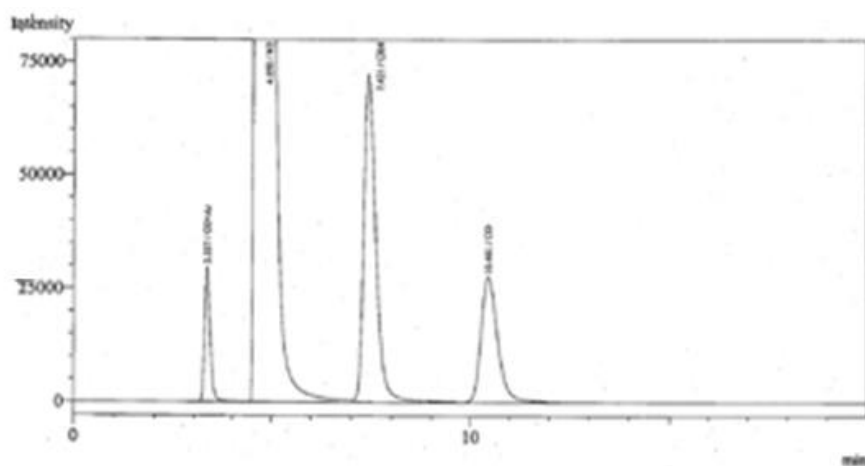


Fig. 2 Chromatogram of TCD-2