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Application Data Sheet

No.12

System Gas Chromatograph

Sulfur Analyzer
Nexis GC-2030FPD
GC-2014FPD

This method applies a chemically-inert material to prevent the absorption of sulfide components. The micro-packed column in this system effectively separates sulfide components and hydrocarbons, thereby avoiding the quenching phenomenon associated with Flame Photometric Detectors. The method can be used to analyze both inorganic and organic sulfides, providing an ideal solution for the analysis of natural gas and refinery gas, as well as liquid samples, such as organic solvents. The system includes LabSolutions GC workstation software. This system may not be suitable for gasoline analysis.

Analyzer Information

System Configuration:
One valve / Capillary Inlet / Capillary column / FPD detector

Sample Information:
Sulfur compounds in natural gas , such as H_2S, COS, mercaptans, aromatic sulfur compounds and sulfides.

Methods met:
ASTM-D6228

Concentration Range:

No.	Name of Compound	Concentration Range	
		Low Conc.	High Conc.
1	H2S	0.1ppmV	100ppmV
2	COS	0.1ppmV	100ppmV
3	MeSH	0.1ppmV	100ppmV
4	EtSH	0.1ppmV	100ppmV
5	DMS	0.1ppmV	100ppmV
6	CS2	0.1ppmV	100ppmV
7	PrSH	0.1ppmV	100ppmV
8	BuSH	0.1ppmV	100ppmV

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

System Features

・Sulfur analysis in refinery gas, natural gas, process gas
・Micro-packed column can separate sulfide components and hydrocarbons effectively
・Sample lines including injection port inert in order to avoid absorption
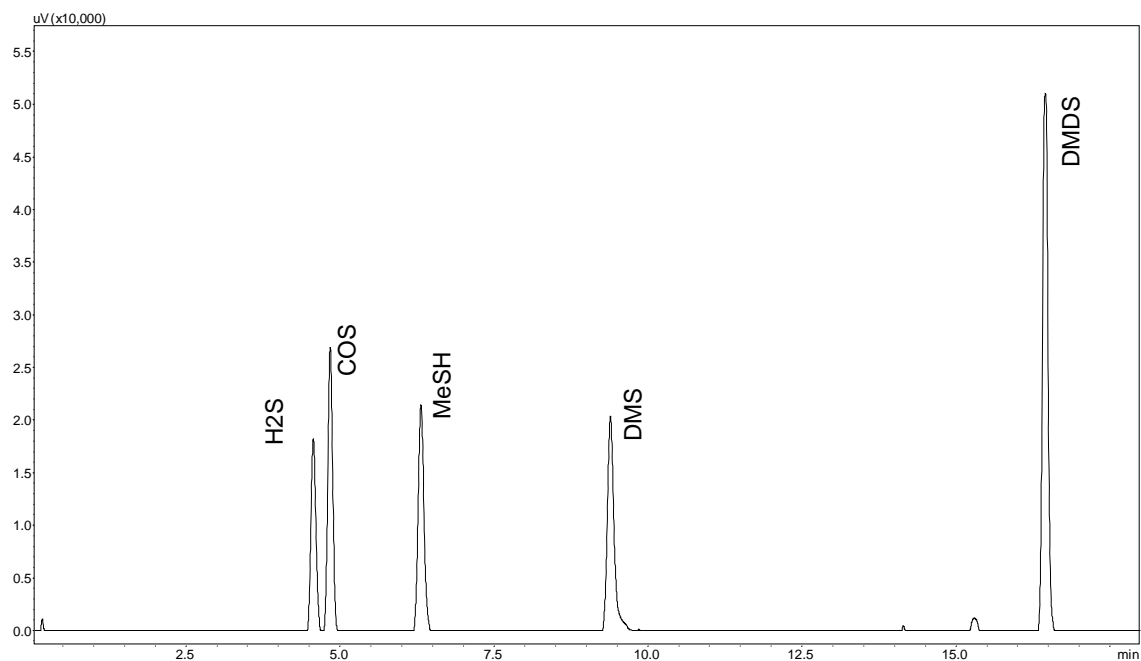・High selectivity for sulfur
・Suitable for measuring S, P and Sn

Typical Chromatograms

uV (x10,000)

Fig. 1 Chromatogram of FPD

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