



Total Sulfur analysis

BIOMETHANE
REFINERY GASES
NATURAL GASES
INDUSTRIAL EMISSIONS AND VOCS
INDUSTRIAL AND SPECIALITY GASES

APPLICATIONS

The combination of at least 3 modules in our ChromPix2® allows analysis of a wide range of sulfur compounds with a few ppm sensitivity.

Thanks to the Total Sulfur application of the PixLPro software, total sulfur results, total mercaptan results and concentration of each mercaptan will be monitored.

SYSTEMS



ChromPix2®



ChromEx200/400®



SAMPLE

Natural gas sample or biogas/biomethane sample

CONCLUSIONS

System modularity allows to address a specific analytical solution to your process for sulfur compounds analysis.

Combination of three analytical modules inside an unique system provides measurement of a wide range of sulfur compounds.

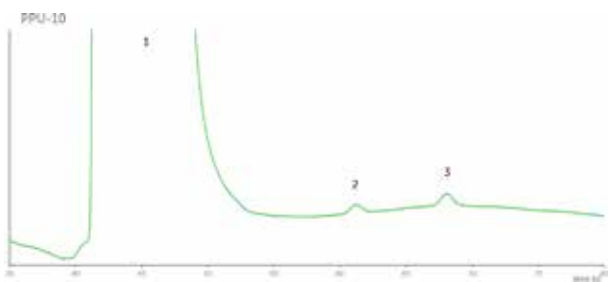
MODULE A

Reference	MK10-TCD-20µL-PPU10-PPU1-F1
Detector	TCD
Column	PPU (Pora-Plot U) 10m
Internal Diameter	0.25mm
Phase Thickness	12µm
Precolumn	PPU (Pora-Plot U) 1m
Backflush	✓
Sample Loop	20µL
Regeneration	✗

METHOD

Carrier Gas	Helium
Carrier Gas Pressure (max)	36.2 psi - 2.5 bar
Detector T°C	80°C
Column T°C	105°C
Column Pressure	1.5 bar
Sample Loop T°C	105°C
Sample Loop Pressure	0.5 bar
Injection Time	13s
Analysis Time	80s

CHROMATOGRAM



RESULTS

	LOD	LOQ	RSD
1 Injection			
2 H ₂ S	1ppm	3ppm	10% (3ppm)
3 COS	1ppm	3ppm	10% (3ppm)

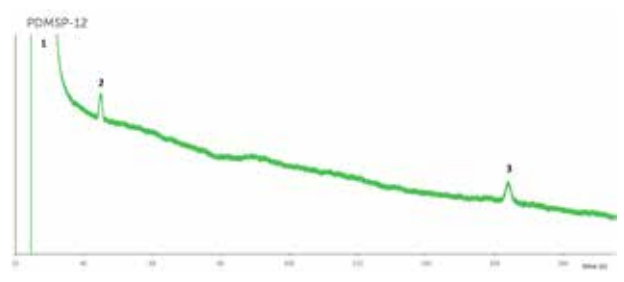
MODULE B

Reference	MK6-TCD-20µL-PDMSP12-F2
Detector	TCD
Column	PDMSP (20 % Diphenyl - 80 % Methylpolysiloxane) 10m
Internal Diameter	0.25mm
Phase Thickness	1µm
Precolumn	None
Backflush	✗
Sample Loop	20µL
Regeneration	✗

METHOD

Carrier Gas	Helium
Carrier Gas Pressure (max)	36.2 psi - 2.5 bar
Detector T°C	60°C
Column T°C	60°C
Column Pressure	1.5 bar
Sample Loop T°C	60°C
Sample Loop Pressure	0.5 bar
Injection Time	1s
Analysis Time	200s

CHROMATOGRAM



RESULTS

	LOD	LOQ	RSD
1 Injection			
2 TBM	1ppm	2ppm	<10% (2ppm)
3 THT	1ppm	2ppm	<10% (2ppm)

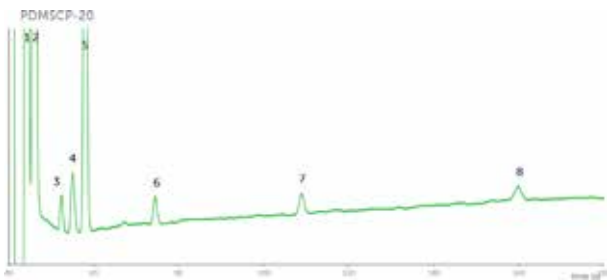
MODULE C

Reference	MK6-TCD-30µL-PDMSCP20-F1
Detector	TCD
Column	PDMSCP (14%-Cyanopropylphenyle - 86 % Methylpolysiloxane) 10m
Internal Diameter	0.25mm
Phase Thickness	1µm
Precolumn	None
Backflush	✘
Sample Loop	30µL
Regeneration	✘

METHOD

Carrier Gas	Helium
Carrier Gas Pressure (max)	36.2 psi - 2.5 bar maxi
Detector T°C	70°C
Column T°C	70°C
Column Pressure	1.5 bar
Sample Loop T°C	70°C
Sample Loop Pressure	0.5 bar
Injection Time	1.5s
Analysis Time	180s

CHROMATOGRAM



RESULTS

	LOD	LOQ	RSD
1 iC5	1ppm	3ppm	10% (3ppm)
2 nC5	1ppm	3ppm	10% (3ppm)
3 EM	1ppm	3ppm	10% (3ppm)
4 DMS + CS2	1ppm	3ppm	10% (3ppm)
5 nC6	1ppm	3ppm	10% (3ppm)
6 MES	1ppm	3ppm	10% (3ppm)
7 DES	1ppm	3ppm	10% (3ppm)
8 DMDS	1ppm	3ppm	10% (3ppm)