



Sulfur and oxygenated compounds

Application Note

Energy & Fuels

Authors

Agilent Technologies, Inc.

Introduction

Analysis of sulfur and oxygenated compounds on an Agilent Lowox column in 29 minutes.



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Conditions

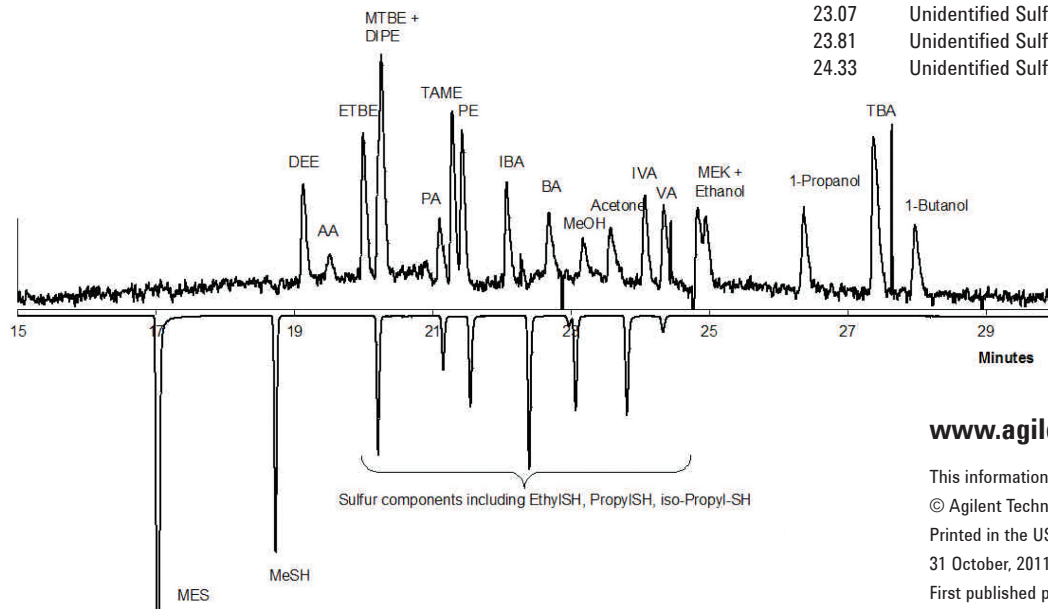
Technique : GC-capillary
 Column : Agilent Lowox, 0.53 mm x 10 m
 Part no. CP8587
 Temperature : 50 °C, 5 min → 240 °C, 10 °C/min, 2.7 min
 Carrier Gas : Helium, 2 mL/min
 Injector : Splitter, 1:10
 Detector : PFPD / FID parallel
 Sample Size : 1 µL
 Concentration Range : 5 ng per component on the column

Oxygenates

tR min	Component	Name
19.13	DEE	diethylether
19.52	AA	acetaldehyde
20.00	ETBE	ethyl tert butyl ether
20.26	MTBE	methyl tert butyl ether
20.26	DIPE	diisopropyl ether
21.10	PA	propanal
21.28	TAME	tert amyl methyl ether
21.43	PE	propyl ether
22.07	IBA	iso butyraldehyde
22.68	BA	butyraldehyde
23.17	MeOH	methanol
23.57	Acetone	acetone
24.07	IVA	isovaleraldehyde
24.34	VA	valeraldehyde
24.83	MEK	methyl ethyl ketone
24.95	ethanol	ethanol
26.37	1-propanol	1-propanol
27.38	TBA	tert butyl alcohol
27.98	1-butanol	1-butanol

Sulfur components

tR (min)	component	Name
17.02	MES	methylethylsulfide
18.73	MESH	methylmercaptane
?	ethyl-SH	ethylmercaptane
?	propyl-SH	propylmercaptane
?	iso-propyl-SH	iso-propylmercaptane
20.21	Unidentified Sulfur component	
21.15	Unidentified Sulfur component	
21.55	Unidentified Sulfur component	
22.40	Unidentified Sulfur component	
22.97	Unidentified Sulfur component	
23.07	Unidentified Sulfur component	
23.81	Unidentified Sulfur component	
24.33	Unidentified Sulfur component	



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This information is subject to change without notice.

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