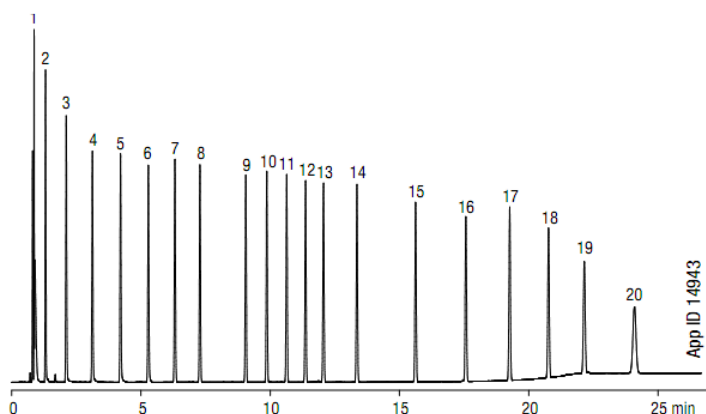


Примеры хроматограмм

Simulated Distillation Markers: ASTM Method D 2887



Column: Zebron ZB-1
Dimensions: 10 meter x 0.53 mm x 2.65 μ m
Part No.: 7CK-G001-35
Injection: Split 10:1 @ 360 °C, 1 μ L
Carrier Gas: Helium @ 8.1 mL/min (constant flow)
Oven Program: 35 °C to 360 °C @ 15 °C/min for 5 min
Detector: FID @ 360 °C

Sample:	1. Pentane (C5)	11. Hexadecane (C16)
	2. Hexane (C6)	12. Heptadecane (C17)
	3. Heptane (C7)	13. Octadecane (C18)
	4. Octane (C8)	14. Eicosane (C20)
	5. Nonane (C9)	15. Tetracosane (C24)
	6. Decane (C10)	16. Octacosane (C28)
	7. Undecane (C11)	17. Dotriacontane (C32)
	8. Dodecane (C12)	18. Hexatriacontane (C36)
	9. Tetradecane (C14)	19. Tetracontane (C40)
	10. Pentadecane (C15)	20. Tetraetracontane (C44)

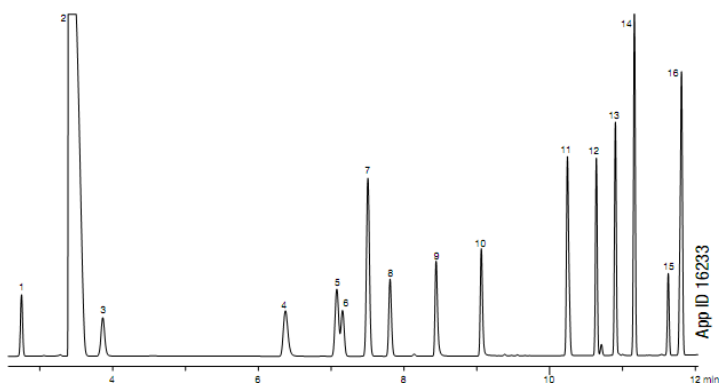
Промышленная химия

Industrial Chemicals: Nitrogen Based Compounds

Column: Zebron ZB-1
Dimensions: 30 meter x 0.53 mm x 3.00 μ m
Part No.: 7HK-G001-36
Injection: Split 10:1 @ 250 °C, 1 μ L
Carrier Gas: Helium @ 3.8 mL/min (constant flow)
Oven Program: 70 °C for 6 min to 250 °C @ 30 °C/min for 12 min
Detector: FID @ 300 °C

Sample: 100 ppm per analyte in Carbon Disulfide (CS₂)

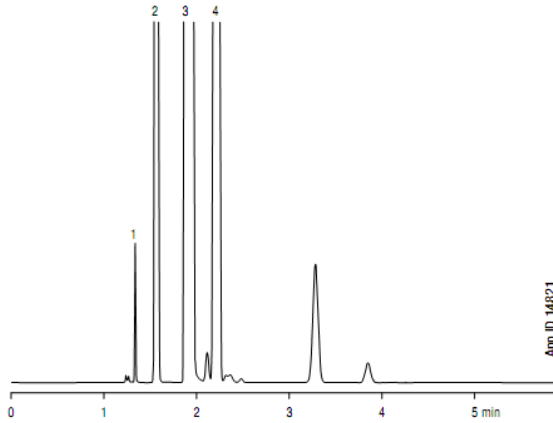
1. Acetonitrile	9. Dimethyl sulfoxide
2. Solvent / Carbon disulfide	10. Hexylamine
3. Diethylamine	11. Dibutylamine
4. 1-Methylpyrrolidine	12. Benzylamine
5. N,N-Dimethylbutylamine	13. Methylbenzylamine
6. Nitropropane	14. Nitrobenzene
7. Pyridine	15. Contaminant
8. Dimethylformamide	16. Tributylamine



ГСМ и топлива

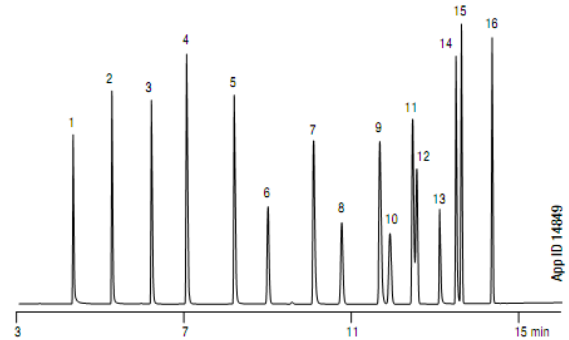
Butane Purity

Column: Zebron ZB-1
Dimensions: 60 meter x 0.32 mm x 3.00 µm
Part No.: 7KM-G001-36
Injection: Split 10:1 @ 200 °C, 5 µL
Carrier Gas: Hydrogen @ 6.5 mL/min (constant flow)
Oven Program: 40 °C Isothermal
Detector: FID @ 200 °C
Sample: 1. Ethane
 2. Propane
 3. Isobutane
 4. Butane



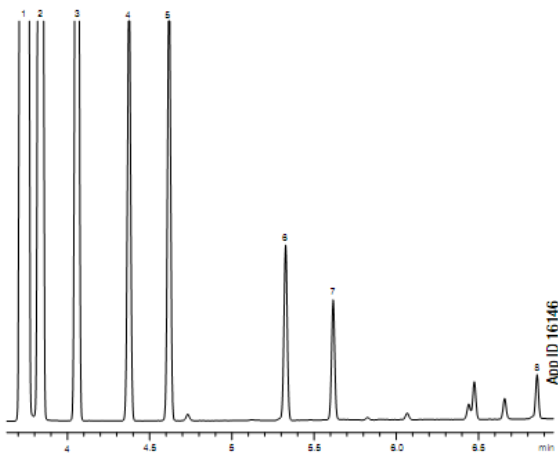
Petroleum Oxygenates: ASTM Method D 4815

Column: Zebron ZB-1
Dimensions: 60 meter x 0.25 mm x 1.00 µm
Part No.: 7KG-G001-22
Injection: Split 40:1 @ 200 °C, 0.2 µL
Carrier Gas: Helium @ 1.8 mL/min (constant flow)
Oven Program: 40 °C for 6 min to 50 °C at 5 °C/min for 4 min to 175 °C @ 25 °C/min for 5 min
Detector: FID @ 250 °C
Sample: 1. Methanol
 2. Ethanol
 3. Isopropanol
 4. tert-Butanol
 5. 1-Propanol
 6. Methyl tert-Butyl Ether
 7. sec-Butanol
 8. Isopropyl ether
 9. Isobutanol
 10. tert-Butyl ethyl ether
 11. tert-Pentanol
 12. Methylcyclopentane
 13. 1,2-Dimethoxyethane
 14. n-Butyl alcohol
 15. Benzene
 16. tert-Amyl methyl ether



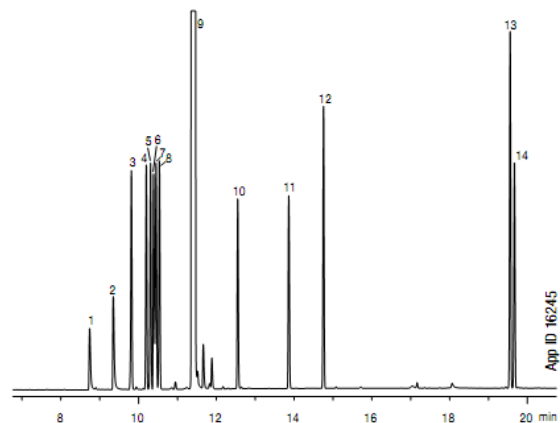
Extended Natural Gas: ASTM Method D 1945-96

Column: Zebron ZB-1
Dimensions: 60 meter x 0.32 mm x 1.00 µm
Part No.: 7KM-G001-22
Injection: Split 50:1 @ 250 °C, 500 µL
Carrier Gas: Helium @ 2 mL/min (constant flow)
Oven Program: 35 °C hold for 3 min to 200 °C ramp @ 30 °C/min
Detector: FID @ 250 °C
Sample: 1. Methane
 2. Ethane
 3. Propane
 4. Isobutane
 5. Butane
 6. Isopentane
 7. Pentane
 8. Heptane



Methyl-t-Butyl Ether (MTBE): ASTM Method D 5441-93

Column: Zebron ZB-1
Dimensions: 100 meter x 0.25 mm x 0.50 µm
Part No.: 7MG-G001-17
Injection: Split 50:1 @ 200 °C, 1 µL
Carrier Gas: Helium @ 1.4 mL/min (constant flow)
Oven Program: 50 °C for 8 min to 180 °C @ 30 °C/min for 9 min
Detector: FID @ 250 °C
Sample: 1. Methanol
 2. Contaminant
 3. 2-Methylbutane
 4. Pentane
 5. trans-2-Pentene
 6. t-Butanol
 7. cis-2-Pentene
 8. 2-Methyl-2-butene
 9. Methyl-t-butyl ether
 10. tert-Butyl ethyl ether
 11. tert-Amyl methyl ether
 12. 2,4,4-Trimethyl-1-pentene
 13. 4,4-Dimethyl-2-neopentyl-1-pentene
 14. 2,2',4,6,6'-Pentamethyl-3-heptene (cis, trans)



ASTM Method D 3710 - Fast

Column: Zebron ZB-1
Dimensions: 15 meter x 0.53 mm x 0.50 μ m
Part No.: 7EK-G001-17
Injection: Split 50:1 @ 200 $^{\circ}$ C, 0.1 μ L
Carrier Gas: Helium @ 7 mL/min (constant pressure)
Oven Program: 35 $^{\circ}$ C for 1 min to 200 $^{\circ}$ C @ 35 $^{\circ}$ C/min for 1 min
Detector: FID @ 220 $^{\circ}$ C

- Sample:**
- | | |
|------------------------|-------------------|
| 1. Isopentane | 10. p-Xylene |
| 2. Pentane | 11. o-Xylene |
| 3. 2-Methylpentane | 12. Propylbenzene |
| 4. Hexane | 13. Decane |
| 5. 2,4-Dimethylpentane | 14. Butylbenzene |
| 6. Heptane | 15. Dodecane |
| 7. Toluene | 16. Tridecane |
| 8. Octane | 17. Tetradecane |
| 9. m-Xylene | 18. Pentadecane |

