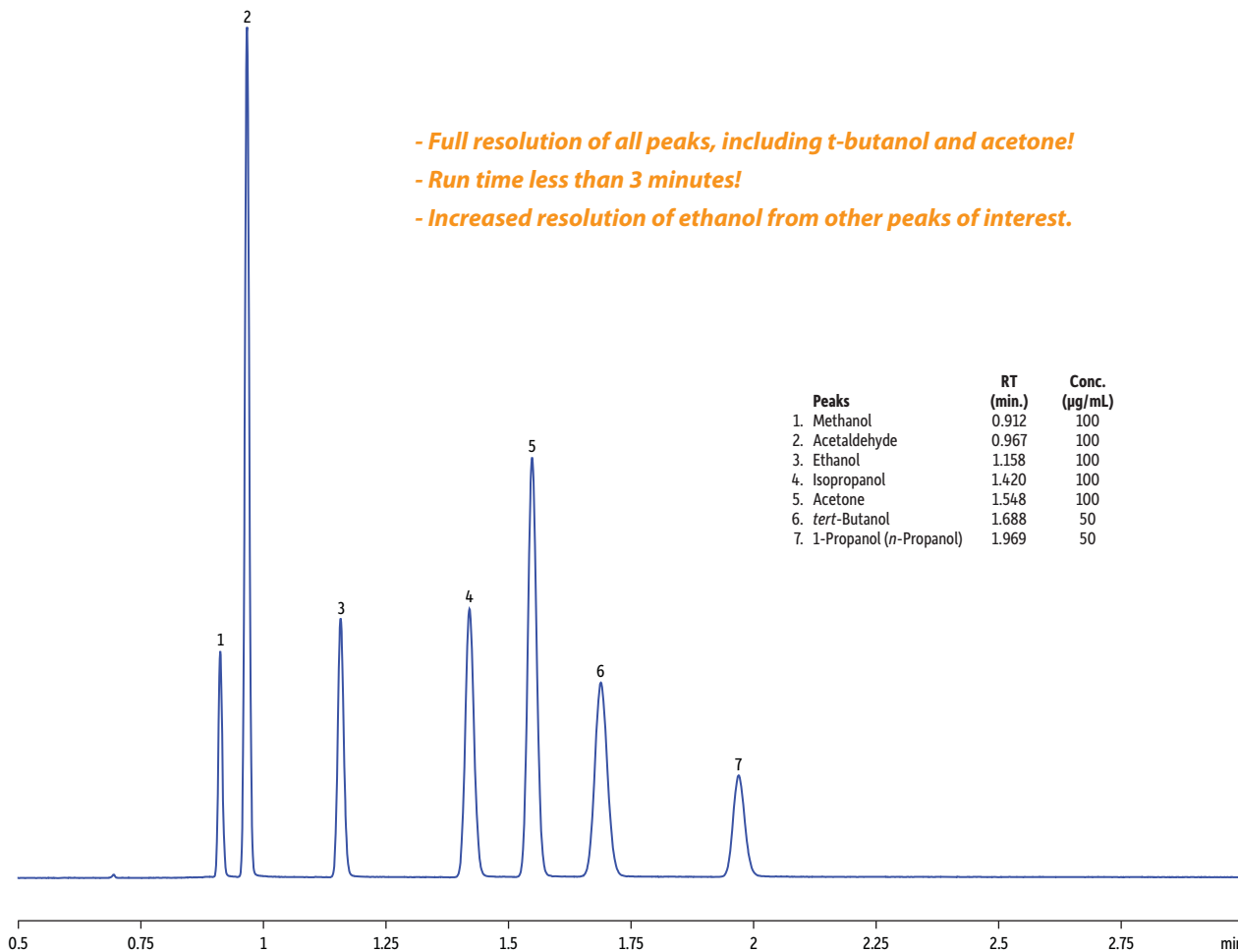


Blood Alcohol Analysis on Rtx®-BAC Plus 1



- Full resolution of all peaks, including t-butanol and acetone!
- Run time less than 3 minutes!
- Increased resolution of ethanol from other peaks of interest.

Peaks	RT (min.)	Conc. (µg/mL)
1. Methanol	0.912	100
2. Acetaldehyde	0.967	100
3. Ethanol	1.158	100
4. Isopropanol	1.420	100
5. Acetone	1.548	100
6. tert-Butanol	1.688	50
7. 1-Propanol (n-Propanol)	1.969	50

GC_CF1153

Column Rtx®-BAC Plus 1, 30 m, 0.32 mm ID, 1.8 µm (cat.# 18004)
Sample BAC resolution control standard n-P (cat.# 36010)
 BAC resolution control standard t-B (cat.# 36011)
Diluent: Water
Conc.: 50 µL of each standard were diluted in 900 µL water in a 20 mL headspace vial.
Injection Headspace-loop split (split ratio 50:1)
Liner: 1 mm ID straight inlet liner (cat.# 20972)
Headspace-Loop
Inj. Port Temp.: 200 °C
Instrument: Tekmar HT3
Inj. Time: 3 min.
Transfer Line Temp.: 125 °C

Valve Oven Temp.: 125 °C
Standby flow rate: 50 mL/min
Sample Temp.: 60 °C
Sample
Equil. Time: 5 min.
Vial Pressure: 30 psi
Pressurize Time: 1 min.
Loop Pressure: 20 psi
Loop Fill Time: 1 min.
Oven
Oven Temp.: 40 °C (hold 3 min.)
Carrier Gas He, constant flow
Linear Velocity: 80 cm/sec. @ 40 °C
Detector FID @ 240 °C
Make-up Gas
Flow Rate: 30 mL/min.
Make-up Gas Type: N₂
Instrument Agilent/HP6890 GC
Notes: Headspace concentrator courtesy of Teledyne Tekmar, Mason, OH.