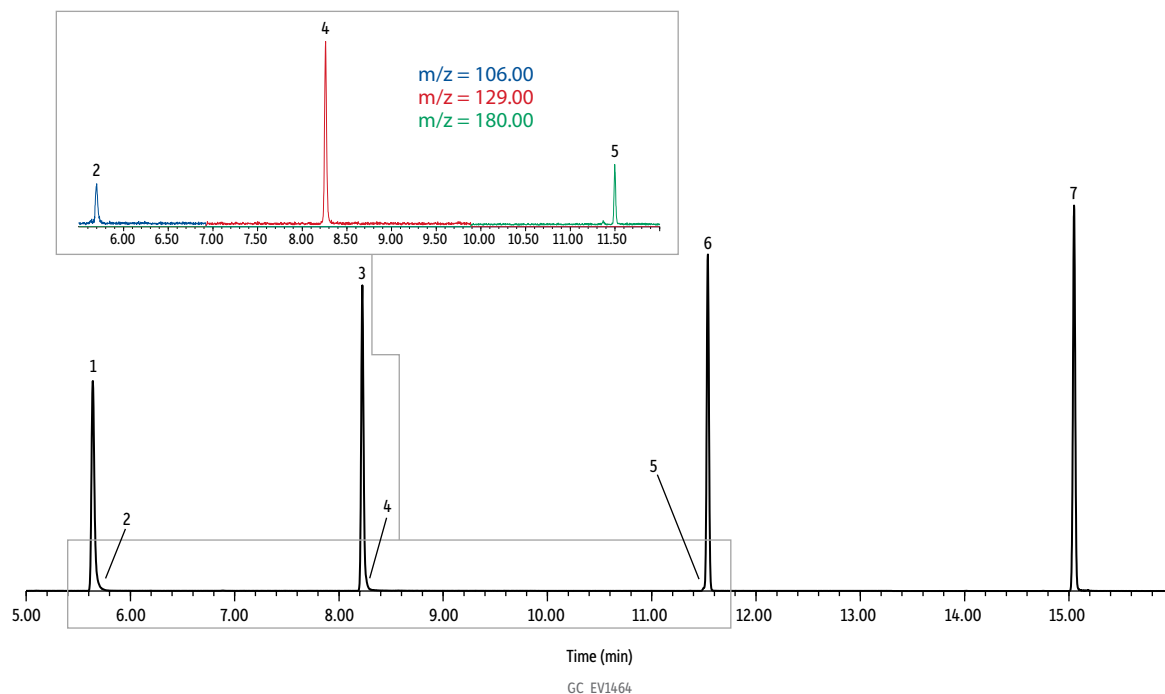


EPA Method 530 UCMR4 Standard at Method Reporting Limit on Rxi-5Sil MS (SIM)



Peaks	t_R (min)	Conc. ($\mu\text{g/mL}$)
1. o-Toluidine-d9 (SS)	5.64	1.0
2. o-Toluidine	5.70	0.070
3. Quinoline-d7 (SS)	8.22	1.0
4. Quinoline	8.26	0.20
5. Butylated hydroxyanisole (BHA)	11.50	0.30
6. Acenaphthene-d10 (IS)	11.54	1.0
7. Phenanthrene-d10 (IS)	15.05	1.0

Column Rxi-5Sil MS, 30 m, 0.25 mm ID, 0.25 μm (cat.# 13623)
Sample Method 530 UCMR4 standard (cat.# 572262)
 Method 530 UCMR4 surrogate standard (cat.# 572265)
 Method 530 UCMR4 internal standard (cat.# 572266)
 Dichloromethane

Diluent:
Injection
 Inj. Vol.: 1 μL pulsed splitless (hold 1.0 min)
 Liner: Topaz 4 mm ID single taper inlet liner w/wool (cat.# 23303)
 Inj. Temp.: 275 $^{\circ}\text{C}$
 Pulse Pressure: 30 psi (206.8kPa)
 Pulse Time: 1.05 min
 Purge Flow: 60 mL/min

Oven
 Oven Temp.: 70 $^{\circ}\text{C}$ (hold 1.5 min) to 200 $^{\circ}\text{C}$ at 10 $^{\circ}\text{C}/\text{min}$ to 320 $^{\circ}\text{C}$ at 7 $^{\circ}\text{C}/\text{min}$ (hold 3 min)
Carrier Gas
 Carrier Gas: He, constant flow
 Flow Rate: 1.2 mL/min
Detector
 Detector: MS
 Mode: SIM
 SIM Program:

Group	Start Time (min)	Ion(s) (m/z)	Dwell (ms)
1	1.543	106, 107, 112, 114	25
2	6.917	102, 108, 129, 136	25
3	9.881	137, 162, 164, 180	25
4	13.297	160, 188	25

Transfer Line Temp.: 280 $^{\circ}\text{C}$
 Analyzer Type: Quadrupole
 Source Type: Stainless Steel
 Drawout Plate: 6 mm ID
 Source Temp.: 280 $^{\circ}\text{C}$
 Quad Temp.: 180 $^{\circ}\text{C}$
 Solvent Delay Time: 1.45 min
 Tune Type: DFTPP
 Ionization Mode: EI
Instrument
 HP6890 GC & 5973 MSD

Notes
 The EPA Method 530 UCMR4 standard analyte concentrations vary to simplify preparing ICAL levels based on the minimum method reporting levels.

The Method was developed on the Rtx-1701 column, but allows the use of any column with adequate selectivity. These target analytes are often included in EPA Method 8270, which uses the Rxi-5Sil MS column.