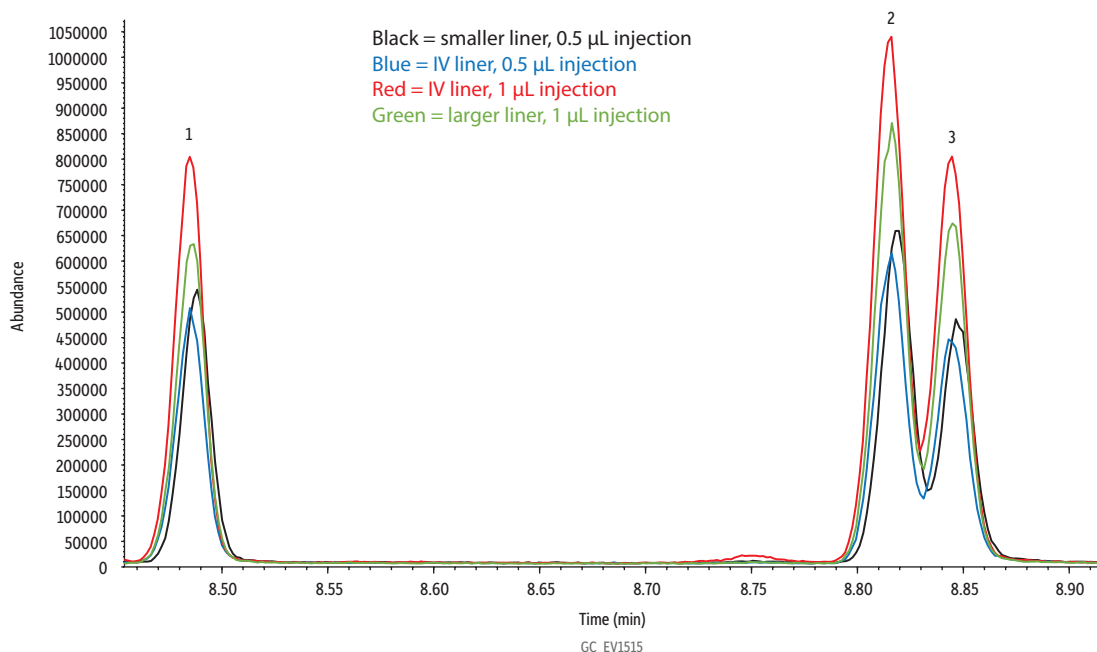


Comparison: Pesticides on Narrow-Bore Rxi-5ms - IV Liner Article Figure 10

Improved Peak Height When Using an IV Liner



Peaks	tr (min)	Conc. (µg/mL)
1. Methidathion	8.49	2
2. Prothiofos	8.82	2
3. Profenofos	8.85	2

Column Rxi-5ms GC capillary column, 20 m, 0.18 mm ID, 0.18 µm (cat.# 13402)
Standard/Sample Organophosphorus pesticide mix, European formulation, acetone, 1 mL/ampul (cat.# 32418)
 1-Bromo-2-nitrobenzene internal standard, 1000 µg/mL, acetone, 1 mL/ampul (cat.# 32279)
 Tributylphosphate standard, 1000 µg/mL, acetone, 1 mL/ampul (cat.# 32280)
 Triphenylphosphate standard, 1000 µg/mL, acetone, 1 mL/ampul (cat.# 32281)
 4-Chloro-3-nitrobenzotrifluoride standard, 1000 µg/mL, acetone, 1 mL/ampul (cat.# 32282)
 Acetone

Diluent:
Injection
 Inj. Vol.: 0.5-1 µL splitless (hold 3 min)
 Liner: Three Topaz single taper, splitless inlet liners with quartz wool and premium deactivation were compared. All were 78.5 mm long with a 6.5 mm OD and the following IDs: 2.0 mm (cat.# 23316); 3.0 mm (cat.# 27231); and 4.0 mm (cat.# 23303).

Inj. Temp.: 250 °C
Purge Flow: 15 mL/min
Oven
Oven Temp.: 35 °C (hold 0.5 min) to 220 °C at 30 °C/min to 240 °C at 8 °C/min to 315 °C at 23 °C/min (hold 10 min)
Carrier Gas He, constant flow
Flow Rate: 1.01 mL/min
Linear Velocity: 44.518 cm/sec @ 35 °C
Dead Time: 0.75 min @ 35 °C
Detector MS
Mode: Scan
Scan Program:

Group	Start Time (min)	Scan Range (amu)	Scan Rate (scans/sec)
1	1.5	50-550	9.9

Transfer Line Temp.: 250 °C
Analyzer Type: Quadrupole
Source Type: Extractor
Source Temp.: 230 °C
Quad Temp.: 150 °C
Electron Energy: 929 eV
Solvent Delay Time: 1.5 min
Tune Type: PFTBA
Ionization Mode: EI
Instrument Agilent 7890A GC & 5975C MSD
Sample Preparation 3 µL of cat.# 32279, 32280, 32281, 32282 and 42 µL of cat.# 32418 were added to 3012 µL of acetone. Splitless injections were performed with a 10 µL SGE autosampler syringe (cat.# 24795).