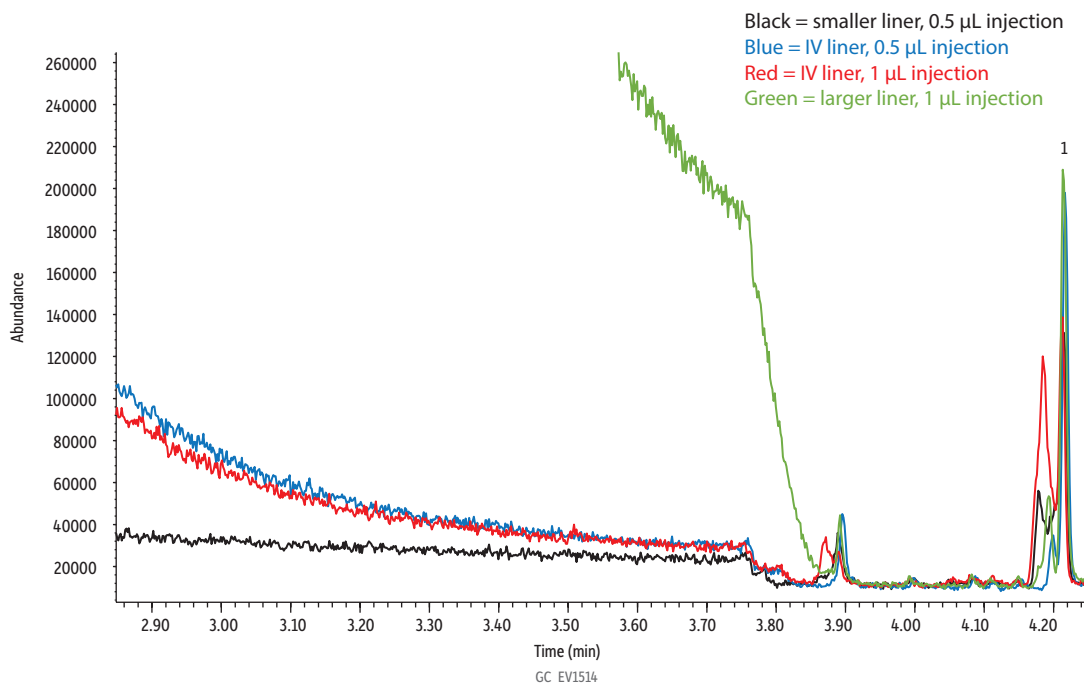


# Comparison: Pesticides on Narrow-Bore Rxi-5ms - IV Liner Article Figure 11

## Reduced Peak Splitting in Early-Eluting Compounds When Using an IV Liner



Peaks	tr (min)	Conc. (µg/mL)
1. 4-Chloro-3-nitrobenzotrifluoride	4.206	1

**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** 0.5-1 µL splitless (hold 3 min)  
**Inj. Vol.:**  
**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).