

Cogent Bidentate C8™

Less Retentive RP

Cogent Phase	Particle Size (µm)	Pore Size (Å)	Surface Area (m ² /g)	Carbon Load (%)	Endcapped	Optimum pH Range	Recommended Max. Temp. (°C)	USP Code
Bidentate C8	4	100	390	13-14	No	2.0 – 8.0	80	L7
Bidentate C8 2.6™	2.2	120	340	11-12	No	2.0 – 8.0	80	L7

For further details on 2.6 columns, please see page 25. For ordering information, see page 30.

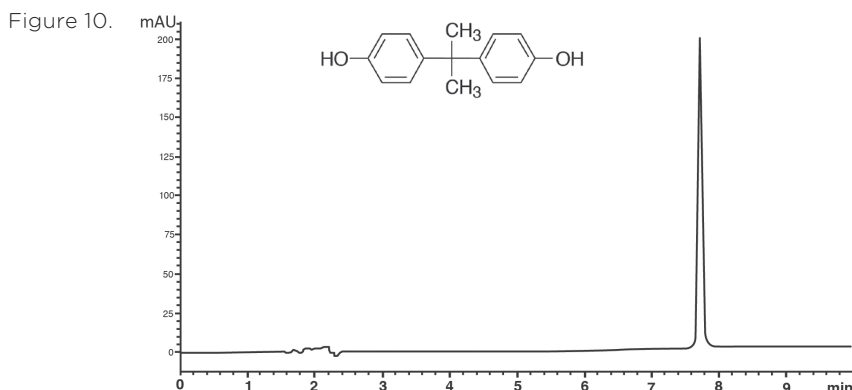
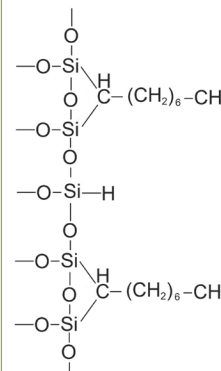
As with the Cogent Bidentate C18 phase, the Cogent Bidentate C8 phase is bonded directly to the TYPE-C silica-hydride surface with two separate points of attachment, using proprietary bonding technology. The phase produces columns that are very stable, efficient and can be operated in three different modes – reversed-phase, normal-phase and ANP, although reversed-phase is the predominant separation technique with this phase.

Cogent Bidentate C8 is less hydrophobic than the Bidentate C18 phase and is an excellent choice for complex mixtures of slightly hydrophilic and hydrophobic compounds. Polar compounds may be retained at low pH for bases and neutral pH for acids. Fast equilibration between gradient runs enables a faster turn-around of samples.

Bisphenol A is a synthetic compound used in a variety of consumer products. It is believed to be an endocrine disruptor, so requires sensitive assays for biological and environmental monitoring. Cogent Bidentate C8 shows good retention of Bisphenol A, with only one column of mobile phase required for equilibration after the gradient. Figure 10 shows the reproducibility of this assay in an overlay of 5 runs.

Figure 9.

Bidentate C8

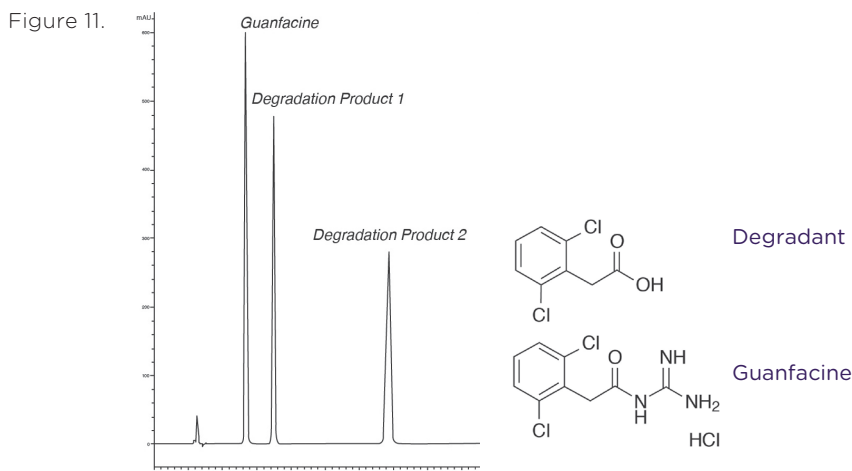


Method Conditions

Column: Cogent Bidentate C8, 4µm, 100Å
Catalog No.: 40008-75P
Dimensions: 4.6 x 75mm
Mobile Phase: A: DI H₂O / 0.1% formic acid (v/v)
 B: Acetonitrile / 0.1% formic acid (v/v)
Gradient:

time (min.)	%B
0	30
2	30
6	90
8	90
9	30

Injection vol.: 5µL
Flow rate: 0.5mL/min
Detection: UV 275nm
Peaks: Bisphenol A



Method Conditions

Column: Cogent Bidentate C8, 4µm, 100Å
Catalog No.: 40008-15P
Dimensions: 4.6 x 150mm
Mobile Phase: 30% Acetonitrile, 70% DI Water w/Conc Phosphoric Acid (1mL/L), 1 g/L SDS
Temperature: 25°C
Injection vol.: 20µL
Flow rate: 1.5mL/min
Detection: UV 220nm
Peaks: 1. Guanfacine
 2. Primary Degradant 1
 3. Primary Degradant 2