



Different Performances from Standard HPLC Phases and Bidentate C18 - Tech Information

Date: 1-APRIL-2012 Last Updated: 1-DECEMBER-2025

What Is the Main Difference Between Standard C18 and Bidentate C18?

The key distinction lies in the silica surfaces—and the benefits silica hydride brings to your separations.

Unlike traditional C18 columns that use silanol (Si–OH) groups on irregular Type A or Type B silica, the Cogent TYPE-C™ stationary phase features silicon-hydride (Si–H) functional groups. This unique chemistry changes the polarity of the surface and introduces novel separation mechanisms, giving you new selectivity options.

As a result, TYPE-C™ columns—including Cogent Bidentate C18™—are highly versatile. They can operate in Normal Phase, Aqueous Normal Phase (ANP), or Reversed Phase, offering a broader range of applications compared to standard C18 columns.

Of most importance is the selectivity is very different.



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