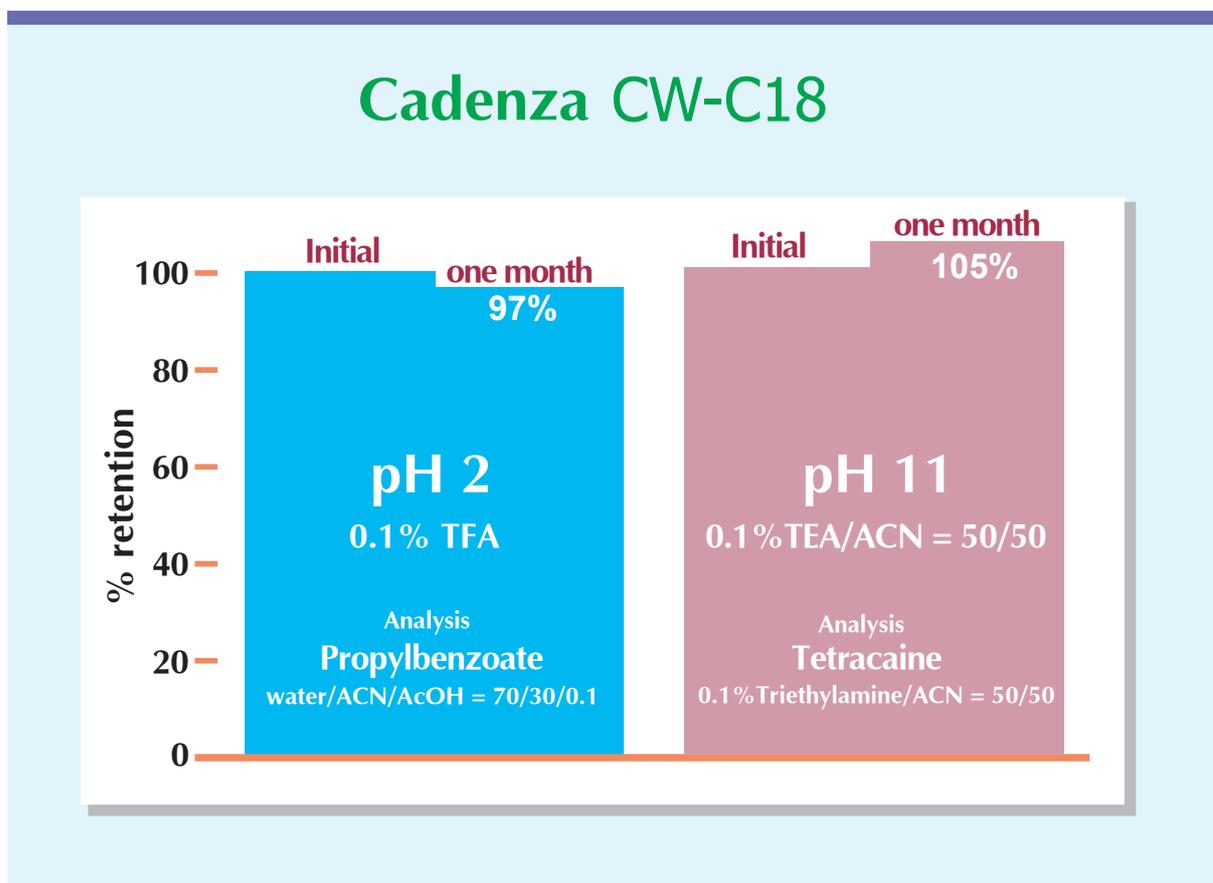


pH Durability of Cadenza CW-C18



Cadenza CW-C18 is a high-throughput and high-resolution ODS phase which consists of 3µm silica particle and 30nm pore size. CW-C18 utilizes the same bonding / end-capping technology as CD-C18. Furthermore, CW-C18 (30nm pore size) has less micropores than the standard 12nm pore-sized CD-C18. This reduced number of micropores on the silica surface results in improved end-capping efficiency and reduced silanol activity.

[Acid durability]

CW-C18 showed excellent durability under low pH conditions (0.1% TFA, pH 2), with almost no loss in retention. TFA can be a useful mobile phase additive for peptide analysis in proteomics.

[Alkali durability]

The unique end-capping technology utilized in making CW-C18 results in improved durability under alkali mobile phase conditions. For the analysis of certain basic compounds, such as tetracaine (see above), basic mobile phase conditions are sometimes required. CW-C18 showed improved column lifetime under alkali mobile phase conditions (0.1% TEA, pH 11).

CW-C18 shows excellent durability under a wide pH range, and should be useful for numerous applications - including small molecule analysis.