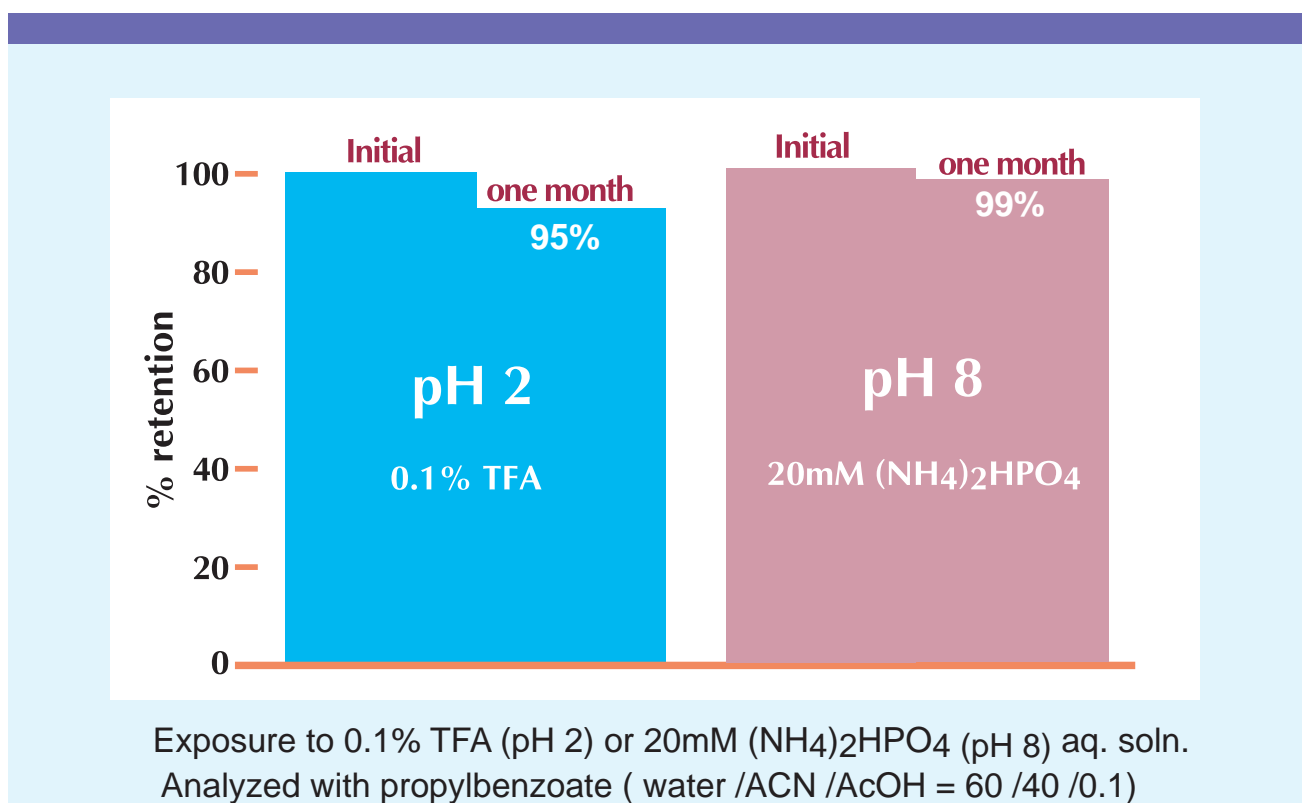


pH durability of CL-C18



CL-C18 design concept is to have an optimal amount of residual silanols and to offer different selectivity than conventional ODS columns.

Residual silanols on an ODS phase decrease the acid / alkali stability of the stationary phase. Not end-capped ODS phases are therefore not practical since the usable pH range is narrow. Cadenza CL-C18 is made by "polymeric end-capping" process - which enables us to manufacture an ODS phase with an optimal amount of residual silanols (Note: CL-C18 contains far less residual silanols than not end-capped ODS phase).

In addition, CL-C18 consists of poly-functional ODS ligands, resulting in a surface structure that is resistant to hydrolysis.

The figure above shows that CL-C18 provides excellent durability in pH 2 and pH 8 solutions (1 month exposure time). Therefore, there is an opportunity for practical usage of CL-C18 since this pH range is comparable to that of conventional ODS phases (pH 2-7).

CL-C18 will expand separation possibilities by using an optimal amount of residual silanols, allowing for increased anion exchange and/or electrostatic interaction.