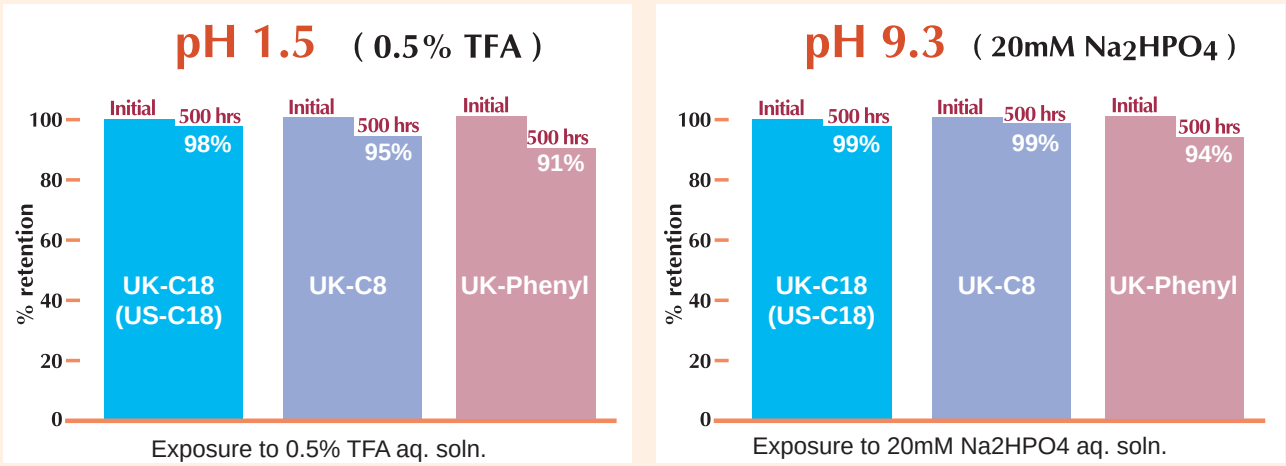
Unison US-C18
Unison UK-C8
Unison UK-Phenyl

Technical

pH Stability of Unison Series

Revolutionary acid- and alkali-proof column for high-polarity compounds



[Analysis]
75 x 4.6 mm
water/ACN/AcOH = 60/40/0.1
1 mL/min
propylbenzoate

The Unison series stationary phase offers extraordinary pH characteristics for a column designed to handle high-polarity compounds.

Conventional columns designed for high-polarity compounds have a low density of alkyl ligands and problems with pH stability arising from a monomeric stationary phase. For example, phosphoric acid eluent (pH 2), which is essential for organic acids analysis, has a drop in the irreversible retention by ligand hydrolysis making constructive analysis difficult.

The Unison column series provides one solution to the problem of ligand hydrolysis in an aqueous elution using a column designed for high-polarity compounds.

As the above graph demonstrates, Unison succeeds in keeping ligand hydrolysis at a minimum for pH 1.5 and pH 9.3 immersion not including a organic solvent. This does not only occur in the ODS stationary phase. Users can achieve similarly exceptional pH characteristics in C8 and Phenyl's stationary phase, which are better for hydrolysis than conventional same phases with mono functional groups.

Unison series column combines poly functional ligands and polymeric endcapping to offer users an extraordinary new surface structure. Moreover, Unison makes possible the optimal retention of high-polarity chemical compounds.

In these ways, Unison series columns not only handles high-polarity compounds but provides solutions for a multitude of applications.