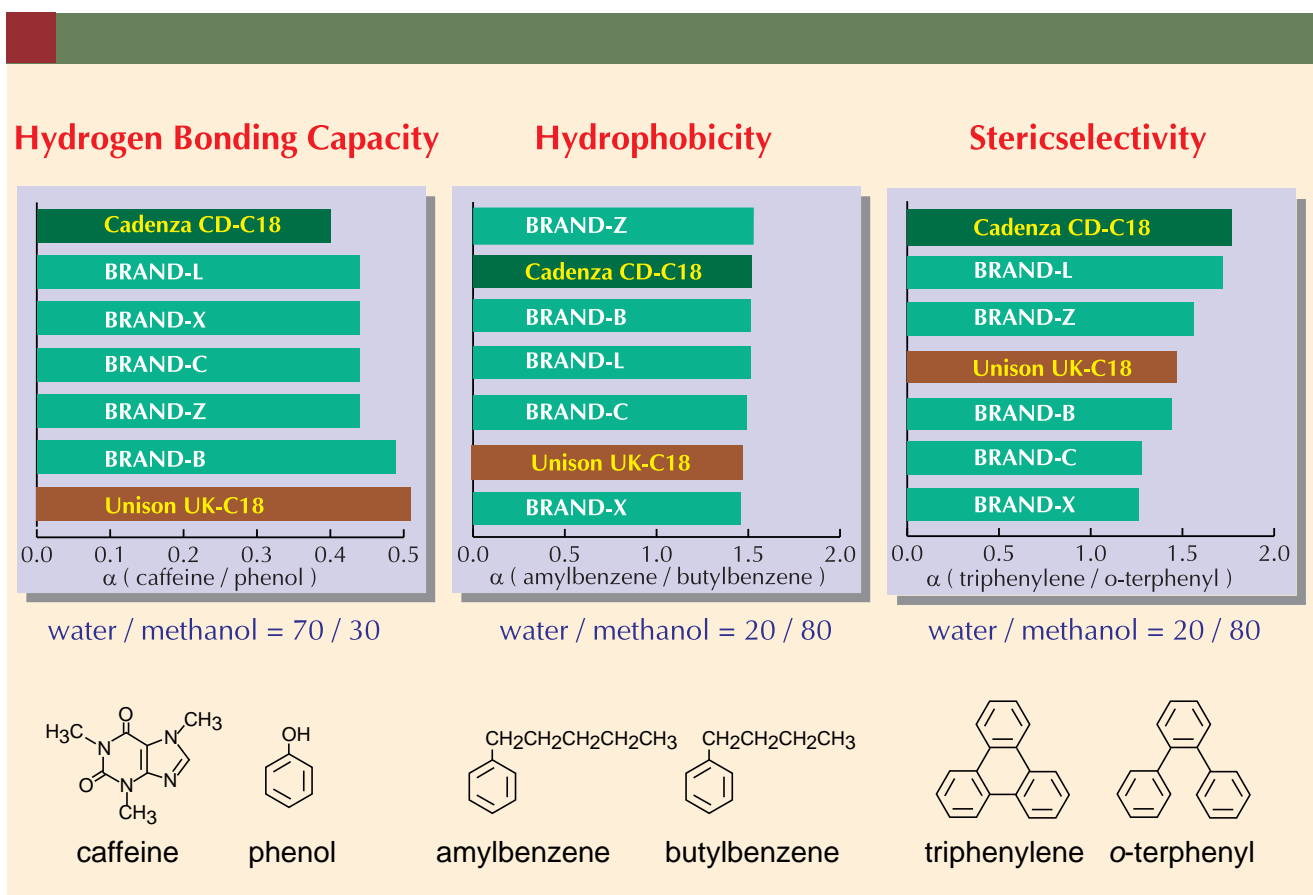


Unison UK-C18
Cadenza CD-C18

Technical

Phase Interaction Difference between Unison and Cadenza



This data compares the basic interactions of the Unison series ODS stationary phase and Cadenza CD-C18.

Hydrophobicity

Hydrophobicity is the most important interaction for the reversed-phases. It is evaluated by the recognition of methylene group of alkylbenzenes. Unison shows a slightly lower hydrophobicity than Cadenza but there is little difference with a conventional ODS stationary phase. Unison's ODS stationary phase is designed to offer the same level of hydrophobicity as conventional columns.

Hydrogen Bonding Capacity

This is an essential interaction in order to retain and separate hydrophilic compounds. Unison's stationary phase is designed with this in mind. In short, Unison has a larger hydrogen bonding interaction than that of Cadenza in order to lengthen the retention time and improve the separation of highly polar compounds. Of course, a reproducible analysis is easily achieved with a 100% aqueous solution.

Stericselectivity

The ability to discern a compound's tertiary structure is extremely useful for the separation of derivatives. Cadenza was design with these needs in mind. Commonly, high polarity ODS columns struggle to spatially discern slight structure differences. Unison not only handles high polarity but also steric selectivity. This is due to the unique structural surface of Unison's stationary phase.