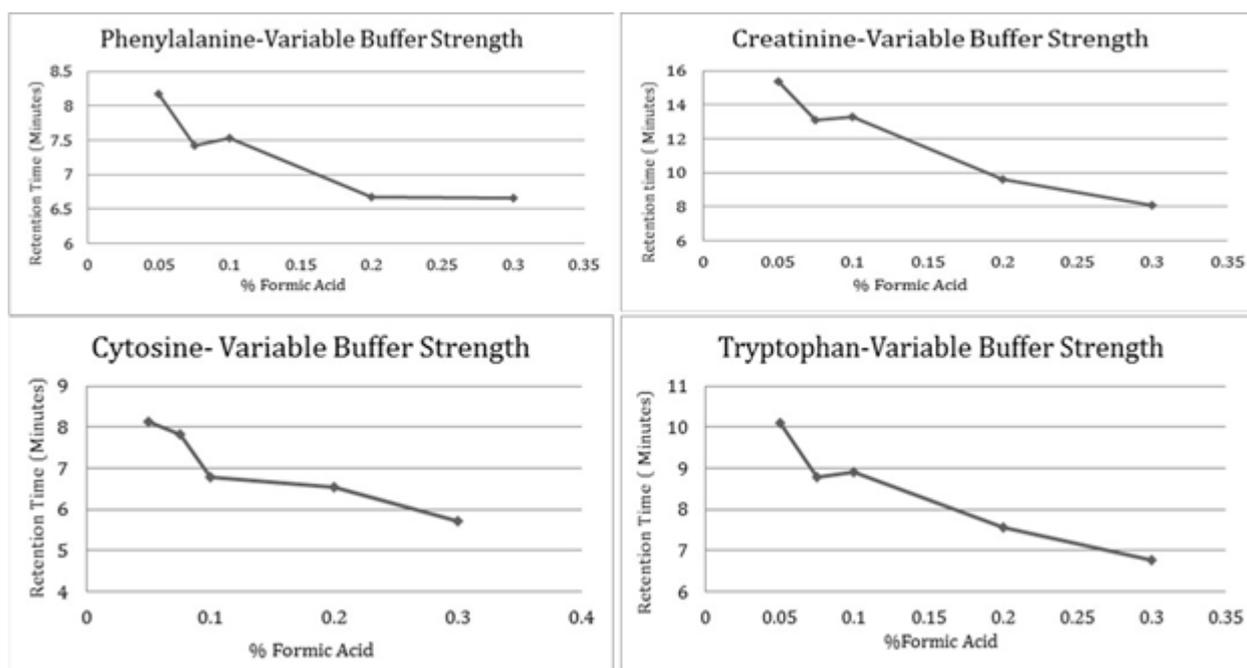


The effect of ionic strength of the mobile phase additive for HPLC columns in Aqueous Normal Phase - Tips & Suggestions

Ionic strength of additives can affect your retention times.

Ionic strength has a smaller or lesser effect in Cogent TYPE-C™ columns when used in Aqueous Normal Phase (ANP) than in methods with HILIC columns because the ANP mechanism is a type of "competitive adsorption" in the adsorbed layer with Acetonitrile, on the silica-hydride surface.

Ionic strength would be expected to have some impact on this processes. Using a lower amount of buffer agents such as formic acid with optimal retention can be a large advantage to using ANP methods. The charts below show examples of 4 compounds and the effect of formic acid in the mobile phase on retention.



Printed from the Chrom Resource Center

Copyright 2025, All Rights Apply

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com