

## How Does Ammonium Fluoride Affect HPLC and LCMS Data if using Aqueous Normal Phase ANP Methods - HPLC Primer

**Ammonium fluoride is beneficial in several ways in an Aqueous Normal Phase ANP chromatographic method:**

- • As a buffer. (i.e. pH control)
- • Improvement of peak shape.
- • Improvement of sensitivity in MS for certain compounds.

Using ammonium fluoride as a mobile phase additive is suggested for LCMS when using Aqueous Normal Phase HPLC methods. For further reading, please refer to the following third-party journal article reference: J. Pesek, M. Matyska, "Ammonium fluoride as a mobile phase additive in aqueous normal phase chromatography," J. Chromatogr. A. 1401, 2015, 69–74.

**NOTE:** care should be taken when using ammonium fluoride because it is corrosive to glass (Teflon bottles are preferred) and using a concentration in excess of 1 mM may permanently damage the column. Cogent TYPE-C™ Silica columns last much longer than ordinary columns but ammonium fluoride may somewhat decrease the column lifetime.

