

## How does ammonium fluoride affect HPLC and LCMS data if using Aqueous Normal Phase ANP methods – FAQ

## 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- $C^{\text{TM}}$  Silica columns last much longer than ordinary columns but ammonium fluoride may somewhat decrease the column lifetime.



Printed from the Chrom Resource Center

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

Date: 05-15-2024