

## How does ammonium fluoride affect chromatography using Cogent TYPE-C HPLC columns?

### Ammonium fluoride as mobile phase additive functions beneficially in several ways in a for LCMS:

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

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 HPLC columns. However, it has been reported that Cogent TYPE-C™ 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](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)

Date: 07-22-2024