

Which acid or base additive should I choose for positive or negative ion mode in LC-MS - FAQ

You should choose ammonium acetate or formic acid depending on whether you're doing positive or negative ion mode.

If it is positive ion mode then 0.1% formic acid is best, if negative mode then 10mM ammonium acetate. It is important not to exceed 10mM ammonium acetate.

With HILIC type columns, you may need to use a significantly higher concentration than with one of the Cogent TYPE-C Silica™ columns in ~~Aqueous Normal Phase~~ ANP. Buildup of ammonium acetate on the MS nebulizer occurs quickly with higher concentrations. When using 10mM, you will still have buildup but you will not need to do the cleaning nearly as often as with a higher ~~buffer~~ concentration.

Also be sure that your B solvent contains at least 5% DI water for solubility reasons. The only time you would generally use both ammonium acetate and formic acid in A and B solvents is if you want a pH gradient, in which case you would do this with one binary solvent but not the other.

