Fosetyl aluminum analysis by Reversed Phase HPLC – Tips & Suggestions

Reversed Phase or Aqueous Normal Phase ANP method tips:

You can use the Cogent Bidentate C18™ column in Reversed Phase *(RP)* with a high water content method. According to a 2014 third-party research article, if the analysis is done by reversed phase an ion pair agent is recommended to increase retention and reduce peak tailing. Here, 8 mM sodium sulfate was used in a pH 4.3 phosphate **buffer** mobile phase. Cogent™ columns work well with ion pair agents and will not be degraded. Also, the Bidentate C18™ is more hydrophobic than other columns on the market due to the Cogent TYPE-C Silica™ surface. Therefore you may obtain higher retention for this highly polar **analyte**.

As for detection methods, it was reported that direct detection with a UV detector can be achieved by the addition of a KOH solution to the sample. In this case, a narrow absorbance **band** was observed with λ_{max} at 200 nm. Indirect detection could also be used; in this case, you add a UV absorbing compound in the mobile phase and obtain a negative peak.

NOTE: If you try the method by Aqueous Normal Phase ANP, we suggest the Cogent Diamond Hydride™ column. You will want to omit the ion pair agent in this case and use a high percent of acetonitrile in the mobile phase to obtain retention.

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