

## Can I use triethylamine TEA with Cogent Diamond Hydride columns - FAQ

### **Yes! Under certain conditions**

The Cogent silica based HPLC columns have an upper pH use limit of approximately pH 8. However having short exposure time without damaging the column depends on how concentrated the TEA solution is, what the pH of the solution is, and how long the column will be exposed to the base.

Triethylamine or TEA, (*Ethanamine, N,N-diethyl-(Diethylamino)ethane*), is generally not compatible and not supported with HPLC columns because under conditions of extended exposure, all silica-based stationary phases will be susceptible to dissolution. Once this occurs, the column is considered unusable and not repairable. You may observe changes in retention time and peak shape distortion as a result of the phenomenon.

**TEA as an additive is compatible using a Cogent Diamond Hydride™** column when the TEA added to the sample diluent or the mobile phase and the TEA concentration does not exceed 0.1% TEA. And the mobile phase pH must be kept kept within the specifications of the column (*pH must not exceed 7.5 for the Cogent Diamond Hydride™ columns*).

Click [HERE](#) for Cogent TYPE-C HPLC column specifications including the Diamond Hydride™.



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