

Can I use triethylamine TEA with a Cogent Silica-C column - 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 with Silica-C $^{\text{TM}}$ columns in the sample diluent or in the mobile phase as long as the TEA concentration does not exceed 0.1% TEA and the mobile phase pH is kept within the specifications of the column (pH must not exceed 7.0 for the Cogent Silica-C columns).

Specifications for Silica-C HPLC columns

More information on Cogent Silica-C HPLC columns



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: 04-05-2024