



Direct silicon to carbon bonds on Cogent TYPE-C HPLC columns produce longer column lifetimes

Typical HPLC bonded phases (C8, C18, NH2 etc) are made with siloxane (Si-O-Si-C) bonds which can be prone to **hydrolysis under some mobile phase conditions**. The oxygen in the this link is the weak point where the bonded phase is cleaved off the particle.

Silicon to Carbon bonds (available only on Cogent TYPE-C™ columns) are much more stable and resistant to hydrolysis and is therefore there is no phase bleed into your instrument. This also means that these columns will last much longer than ordinary columns and be more rugged and will be reproducible longer. You will be able to explore new mobile phase additives and temperature conditions to achieve very difficult separations that might be impossible with your current HPLC columns.

Also, standard Type-B columns made with silanization of organo-silanes to produce siloxane bonded ligands limits the phases which may be bonded onto silica. With our patented, **silica-hydride** surface many compounds previous thought to be improbable to bond to silica can be easily bonded. Examples of this is our unique UDC-Cholesterol™, plus our unique ability to custom synthesis novel phases for our customers.



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: 07-27-2024