

## What is a direct silicon to carbon bond regarding Cogent HPLC columns – FAQ

For chemical bonds in traditional, ordinary type B and Type A silica based materials, the organosilane starting material is Si-O-Si-C and this reagent is reacted with the silica to form the final stationary phase which includes a Si-O-Si-C ligand.

This is in contrast with the Cogent TYPE-C<sup>™</sup> phases in that the Si-C bond is formed directly as part of the reaction resulting in Si-C without the oxygen in the link which is very susceptible to hydrolysis.

The direct silicon-carbon bonds for the Cogent TYPE-C HPLC columns are extremely durable and the proper catalyst and lots of energy is required to break this bond. Similar to the Carbon-Carbon bond in terms of stability and durability.



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