

## Amide or amino HPLC columns. - Tech Information

The **amide** functional group should not be confused with the **amine** or **amino** moiety. The presence of the carbonyl group imparts the amide functionality with significant physical and chemical differences compared to an amine. Most notably, amines are ionizable (positively charged when ionized) while amides are not. Amines are more reactive than amides, such as with aldehydes, which can present some problems in HPLC separations involving samples with these kinds of compounds.

If a chemical bond is formed with an amine and a sample component, the resulting ligand loses its original chromatographic properties and is thereafter considered “deactivated.”

*Hence, amide columns can be advantageous since they avoid these reactivity issues.*

