

What are the uses of PEEK HPLC column hardware - FAQ

PEEK column hardware is primarily used in high-performance liquid chromatography (HPLC) and LC-MS separations of polar hydrophilic compounds including but not limited to biological compounds such as proteins, peptides and other bio active compounds. PEEK column hardware is also used when small organic molecules will interact with stainless steel.

However, PEEK columns can also be used in other types of chromatography, such as ion exchange chromatography (IEC) and size exclusion chromatography (SEC)

In IEC, PEEK columns are used since some stationary phases for the separation of charged molecules are based on their charge properties and you would not want the stainless steel frits or hardware to interfere in standard HPLC columns.

In SEC, PEEK columns are used, and the stationary phase will separate molecules based on their size and shape.

It is important to note that PEEK columns may not be suitable for all types of chromatography. The choice of column material depends on the nature of the sample and the separation mechanism required.