

Column cleaning and care in UHPLC columns - Tips & Suggestions

Despite meticulous care, sometimes non-dissolved chemicals and sample particulates may adsorb onto your UHPLC Column, causing high pressure issues and ultimately making the Column ineffective.

Before cleaning your column, it is suggested to remove the column from the detector and allow your wash solvents to flow through the UHPLC tubing. Following this, it may be a good practice to reverse the column direction and backflush the column. This is particularly important in columns with 2um particle sizes or lower. The frits on the smaller particle sizes are also reduced and can retain particles that normally flow through the 4-5um particle sized columns.

Using 0.22um Syringe Filters in sample prep and utilizing UHPLC grade solvents can help deter running into issues like this.

A great way to add extra protection of your expensive analytical is to use guard columns.

For a belt and suspender approach, consider also adding a guard column as it is both a particulate filter (non-dissolved chemicals) and a chemical filter (removes dissolved chemicals).

