

8 points on how to care for columns



The lifetime of each HPLC column is limited, and for its maximum use it is advisable to dedicate it to a specialist care that will extend its life. It is recommended to regularly monitor the efficiency of the column and its separation capabilities with the help of standards. If you plan to store the column for an extended period of time, use mobile phase that inhibits the growth of microorganisms (mobile phase containing sodium azide or higher concentration of methanol, acetonitrile, etc.). To achieve optimal performance and column life follow these recommendations:

- #1** Check the column's efficiency on a regular basis.
- #2** Always sure that both mobile phases are well miscible when changing them.
- #3** Avoid salts from precipitation in the column, e.g. high content of the organic component in the buffer.
- #4** Use only perfectly filtered and degassed mobile phases.
- #5** Keep the column from drying out. Close securely when not in use.
- #6** For long-term preservation, use a mobile phase to inhibit the growth of mold and bacteria, for example, by adding NaN_3 .
- #7** Use the column according in direction on the label. Reverse flow of 5–10 column volumes can assist in clearing a clogged inlet frit when there is a significant column backpressure.
- #8** Use guard column to protect your analytical column from particulates, solvent impurities and retained sample components.