

5. OPERATION OF THE COLUMN

Putting the column into operation

The pistons, frits and glass body must be cleaned thoroughly before the column is used for the first time. In some cases it may be worth dismantling the column and washing the parts in a sonic bath for a few minutes. After cleaning, all parts must be rinsed in double-distilled water and assembled as described in the second part of point 1 (page 5). Care must be taken that the piston is straight when inserted into the column body, because if it is inserted at an angle, the seal might be damaged.

To operate the column, it must be attached to an appropriate chromatography system or pump using the fittings supplied. Take care when selecting the tubing: tubing diameter must be appropriate to the flow rate to be applied, and the tubing itself must not react with the solvent in question. Should the column bed shrink during use, dead volume can easily be eliminated by moving the variable piston downwards.



PLEASE NOTE: only use degassed and pre-filtered solvents. Particles in the solvent may clog the frits or damage the column packing. Make sure that the particle size of the chromatography material in question is considerably greater than the porosity of the frits!

Hints for operation

1. *Storage of the packed column: open the sealing stoppers by one complete turn in order to compensate for temperature-related changes in pressure.*



IMPORTANT: Protect moistened columns from intense heat and direct sunlight. The heat induces evaporation of highly volatile solvents, and the resulting pressure can crack the column.

2. *We recommend eluting the column from bottom to top so that any air present can escape more quickly. As a result, the column is conditioned more quickly, so less solvent is necessary.*
3. *Before sample application, please ensure that no dead volume has occurred at the column inlet during the conditioning phase. (For removal of dead volume, see page 6).*

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