

ACCESSORIES PROCEDURE FOR USE Empty FPLC Columns



INTRODUCTION

ABT Empty FPLC Columns have the functionalities of a small column but possess many other advantages: they are disposable, easy to pack, identical design for different sizes, robust construction allowing for moderate back pressure, easy to store with long shelf life.

After the chosen resin is packed in the FPLC-Column, the Column can be readily stored and reused many times.

The FPLC columns parts are made of polypropylene which shows excellent chemical resistance to most of the commonly used reagents. It has the standard connections compatible with the common chromatography instruments (such as ÄKTA). Two upper frits are included – only one is used for the column packing – the second frit is an extra one for future column packing.

INSTRUCTIONS for Packing Empty FPLC Columns

1. Push the bottom frit firmly to the bottom of the column, remove the bottom cap and wet the frit by adding several ml of distilled water. Make sure to catch the wetting water solution with a syringe or similar beaker/container. Replace the lower cap.
2. Concentration of the slurry: It is recommended to increase the quantity of the resin bead suspension by reducing the liquid supernatant of the standing resin solution before adding to the column. This can be done by decanting the supernatant liquid of a bottle of resin where the beads are completely settled to the bottom of the bottle and discarding (pipetting the supernatant) most of the clear liquid, leaving enough to reduce the total volume and increase the concentration of the slurry and still allow transfer to the column. It will reduce operation time.
3. Remove the lower cap of the FPLC column and slowly run the concentrated slurry down the walls of the FPLC column. Allow to stand for a while until the beads settle down completely. Re-add more of the slurry and repeat until the packed volume reaches the top of the column. Be careful not to dry the bed. Catch the expressed supernatant liquid as in 1.above.

Note: it is advisable to make the addition slowly to avoid the formation of bubbles. The resin may also be degassed prior to adding to the column.

4. Wet one upper frit with distilled water and insert it on top of the filled resin column, taking care not to trap air. Screw the upper end plug onto the column* carefully. Connect inlet of the FPLC column to the device adaptor connector and set at the working flow rate for about 5min.

Note: Make sure no air is trapped under the top frit.

*The 80 ml FPLC column contains a diffusion plate that fits on top of the top frit. The other FPLC columns do not have a diffusion plate.