Choice of Solvent Transfer to Maximize Column Efficiency

Agilent PLgel Columns

Technical Overview

Introduction

Solvent transfer can have a marked effect on column efficiency. Knowledge of these effects is necessary to obtain the best combination of column and solvent.

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The figure shows the effect of solvent transfer on column efficiency for two types of PLgel column. The transfer procedure was as follows:

1. Measure plate count in THF using o-DCB test probe.
2. Flush column with acetone at 0.5 mL/min for two column volumes.
3. Flush column with DMF at 0.2 mL/min for two column volumes.
4. Test column in DMF using acetone as test probe.
5. Flush column with acetone at 0.2 mL/min for two column volumes.
6. Flush column with THF at 0.5 mL/min for two column volumes.
7. Test column in THF using o-DCB as test probe.
8. Test column in THF with toluene as test probe.

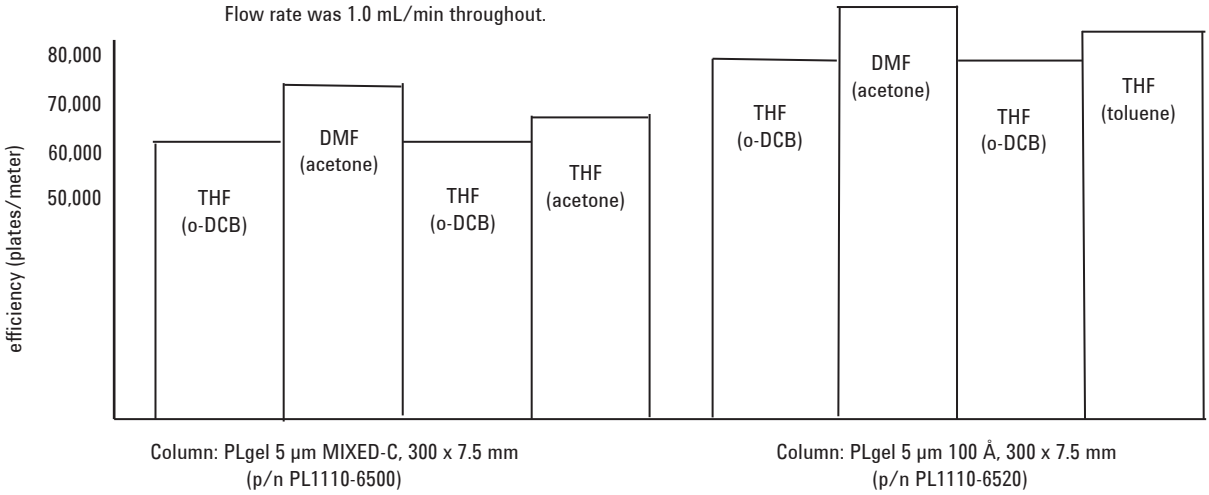

Figure 1. Effect of solvent transfer on column efficiency for two types of PLgel column

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