

TECHNICAL NOTE

6. Effect of guard column

The use of guard columns to protect both analytical and preparative columns is highly recommended.

COSMOSIL guard columns are packed with packing materials identical to that used in analytical and preparative columns. As a result, the COSMOSIL guard columns do not contribute to any decrease in the performance of the main column.



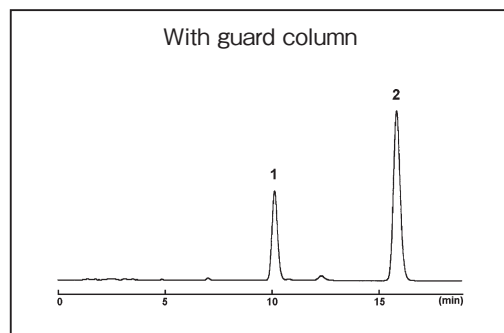
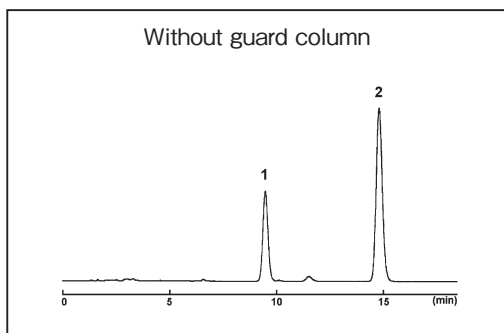
Guard columns



Guard cartridges

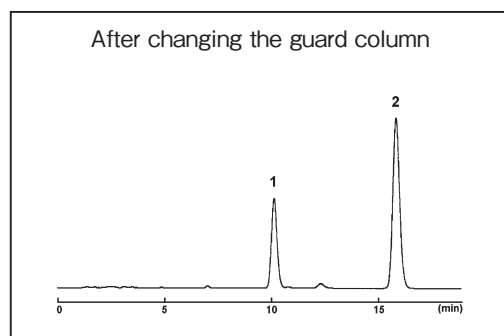
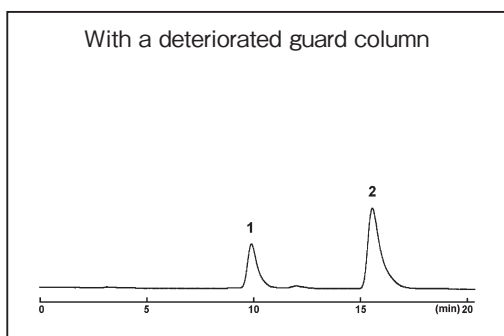
Example of using guard columns

The following chromatograms show analysis examples using a COSMOSIL 5C₁₈-MS-II analytical column (4.6 mm I.D. × 150 mm) and the same column connected with its guard column (4.6 mm I.D. × 10 mm). There is no change in separation characteristics since the packing material of the guard column is identical to that used in the main column.



Inspection of columns

We recommend that the performance of a column be examined regularly. Deteriorated columns shall be replaced timely. If a deteriorated guard column continues to be used, the packed column will also deteriorate.



Column COSMOSIL 5C₁₈-MS-II 4.6 mm I.D. × 150 mm
COSMOSIL 5C₁₈-MS-II 4.6 mm I.D. × 10 mm
Mobile phase methanol : water = 70:30
Flow rate 1.0 ml/min

Temperature 30°C
Detection UV 254 nm
Sample 1. Betamethasone 17-Valerate (0.25 μg)
2. Isoamyl Benzoate (2.5 μg)

Ordering information

Please see respective pages of each column.

Please see page 75 for the parts necessary to use guard columns or guard column cartridges.