

## INSTRUCTION MANUAL FOR CHIRALPAK<sup>®</sup> BSA, CHIRALPAK<sup>®</sup> DSA, CHIRALPAK<sup>®</sup> MSA and CHIRALPAK<sup>®</sup> RSA

**Please read this instruction sheet completely before using this column**

### Operating Conditions

Column Size	Column Flushing-1 (mL/min)	Column Flushing-2 (mL/min)	Typical Flow Rate (mL/min)
2.1 x 50	0.15	0.25	0.25
3.0 x 50	0.3	0.5	0.5
4.0 x 50	0.5	0.9	0.9

- The column is filled with 10% 2-PrOH in water.
- Start at a low flow rate (column flushing-1) and maintain this flow for 2 min.
- Increase the flow rate (column flushing-2) and continue the washing for 10 min.
- Equilibrate the column with the mobile phase to be used.
- Recommended flow rate is 0.25 mL/min with a 2.0 mm I.D. column; 0.5 mL/min with a 3.0 mm I.D. column; 0.9 mL/min with a 4.0 mm I.D. column

### Temperature

The column should be used at room temperature or below.

### Mobile Phase Composition

- ❖ Buffer: Phosphate or acetate buffers should be used (0.01 to 0.1 M)
- ❖ pH: The column can be used in the pH-range 5 to 7.
- ❖ Organic modifier: 2-Propanol and Acetonitrile are the most commonly used (less than 10%)

### Samples

The recommended sample concentration is less than 0.1 mg/mL with an injection volume of 5-20  $\mu$ L. If possible, dissolve the sample in the mobile phase. If the sample is insoluble in the mobile phase, add a higher concentration of the organic modifier. However, be aware of that too high organic modifier concentration might precipitate the buffer salts.

Avoid dissolving the sample in pure organic solvent.

**Do not inject unclear sample solutions or samples containing undissolved compounds.**

## Column Care /Maintenance

1. The column can be stored at room temperature.
2. When in use, the column can be left in the chromatographic system. However, be careful when buffers without organic modifiers, or buffers containing low concentration of acetonitrile are used, since in such mobile phases bacteria grow fast. Such mobile phases must be freshly prepared.
3. When column is stored for a longer period of time, it is recommended to fill it with 10% 2-PrOH in distilled water.
4. It is recommended to store the column in the refrigerator. Before use, repeat the Operating Conditions.

**If the column has been contaminated, wash the column overnight with 10% 2-PrOH in distilled water at a flow rate indicated under (column flushing-1).**

*Operating these columns in accordance with the guidelines outlined here will result in a long column life.*

⇒ If you have any questions about the use of these columns, or encounter a problem, contact:

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