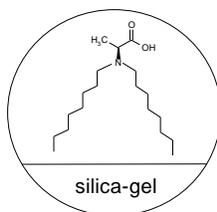


## INSTRUCTION MANUAL FOR CHIRALPAK® MA(+)

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

### Column Description

**Packing composition:** N,N-dioctyl-L-alanine coated on **3µm silica-gel**.



**Column size:** 50mm L x 4.6mm i.d.

**Shipping solvent:** The column is filled with 2mM CuSO<sub>4</sub> aq. solution.

All columns have been pre-tested before packaging. Test parameters and results, as well as the Column Lot Number, are included on a separate (enclosed) page.

### CAUTION

**This column contains an amino acid derivative coated on silica-gel as the packing material. The entire HPLC system including the injector and the injection loop must be flushed with a mobile phase compatible with the column and its storage solvent prior to connecting.**

**Do not use mobile phases other than those listed in this document.**

**Otherwise, the column may be damaged by dissolving the amino acid derivative.**

**Strong-basic compounds are likely to deteriorate the silica-gel used in this column.**

### Standard Analytical Conditions

Mobile phase	: 2mM CuSO <sub>4</sub> aq. solution
Operating temperature	: 0 - 40°C
Column pressure	: Max. 150kg/cm <sup>2</sup>
Flow rate	: 1.0mL/min
Flow direction	: As indicated on column label

## Mobile Phases

Suitable mobile phases :	CuSO <sub>4</sub> aq. solution	= 0.1 - 2.0mM
	CuSO <sub>4</sub> aq. solution / methanol	= 100/0 - 85/15 (v/v)
	CuSO <sub>4</sub> aq. solution / acetonitrile	= 100/0 - 85/15 (v/v)

### NOTES:

- ⇒ Retention time is generally shorter with acetonitrile than with methanol and with a higher content of organic solvent.
- ⇒ Eluent solution should be filtered through a 0.45 mm membrane filter.
- ⇒ High content of organic solvent may cause precipitation of CuSO<sub>4</sub> which makes the tubing clogged.

## Sample

The sample solution should be filtered through a 0.45 mm membrane filter as a rule.

## Column Cleaning

If the column has been contaminated, wash the column with 15% acetonitrile in H<sub>2</sub>O (v/v) at a flow rate of 0.5mL/min for 3 hours.

## Storage

The column can be stored at room temperature.  
When the column is not in use, it is recommended to fill it with a 2mM CuSO<sub>4</sub> aq. solution.

## Important Notice

⇒ STRONGLY BASIC solvent modifiers or sample solutions MUST BE AVOIDED, because they are likely to damage the silica gel used in this column.

***Operating this column 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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