

# Develosil PACKED COLUMN INSTRUCTION MANUAL

## Introduction

Thank you for purchasing our Develosil Packed Column. We recommend you to read this manual carefully to ensure maximal efficiency and long life of the column.

## Confirmation of columns

- Verify that there are no irregularities in the external appearance and packaging of the column.
- Inspect the column to assure you received the correct column size and packing

## Handling of columns

- Do not drop or hit the columns because severe shocks can cause cracks or channels in the packing, which can result in decreased column efficiency.

## Installation of Columns

- Before installing the column, replace the solvent in the pump and the flow line with the mobile phase that will be used.
- Connect the column according to the flow direction indicated on the label.
- To reduce dead volume, be sure that the injector and detector connectors have a small diameter and are as short as possible.

## Mobile phase

- Impurities in mobile phase cause ghost peaks and lead to noise as a result of loss of light intensity when using UV detectors. If possible, always use high-purity solvents.
- Check that the salt doesn't precipitate when mixed with organic solution before use.
- Mobile phase containing insolubles should be filtered prior to use.
- Degas all solvents prior to use to prevent malfunction of the pumps and to avoid detector noise caused by air bubbles.
- If the column operated at temperature near the boiling point of the mobile phase, detector noise may be generated from the mobile phase bubbles.

## pH

- Develosil HPLC columns are designed for use in the pH range of 2-7.5. To prevent early deterioration don't exceed this range. As for the following column, a different pH range is set.

Develosil ODS-HG	pH1~8
Develosil ODS-UG	pH2~10
Develosil RPAQUEOUS-AR	pH1~7
Other C30 column series	pH2~8

○Develosil CN and CN-UG have to use methanol solution, because lifetime to do short with acetonitrile solution.

#### Sample

- Whenever possible, samples should be dissolved in a solvent that has the same composition as the mobile phase.
- Samples containing insolubles should be filtered prior to injection.

#### Analysis

- Keep pressure under 20MPa. When use the preparative columns (I.D. 20mm~), please confirm column pressure limit at test report.
- Frequent changing of the mobile phase composition will accelerate deterioration of the packing.

#### Storage of columns

- If mobile phase containing buffer have been used, the column should be first rinsed thoroughly with organic solvent/water, and then purged with acetonitrile/water or methanol/water before storage.
- When dismantling the column, be sure that the manometer reading is [0].
- When storing columns, first seal them with the plugs provided and then place them in a stable temperature location.

Develosil Columns are manufactured, inspected, packaged and shipped under strict standards of quality control. Should you find any defect in performance, please contact us. However, that we can't guarantee the lifetime of columns, nor can we accept any claim when their performance has deteriorated due to noncompliance with the above operating instructions.

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